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2004

Using Fireworks

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CHAPTER 1

Selecting and Transforming Objects

As you work in Macromedia Fireworks MX 2004, you manipulate vector and bitmap objects, text blocks, slices and hotspots, and areas of pixels. Using the selection and transformation tools, you can move, copy, delete, rotate, scale, or skew objects. In documents that have multiple objects, you can organize the objects by stacking, grouping, and aligning them.

Selecting objects

Before you can do anything with any object on the canvas, you must select it. This applies to a vector object, path, or points; a text block, word, or letter; a slice or hotspot; an instance; or a bitmap object.

You can use any of the following to select objects:

The Layers panel displays each object. You can click an object in the Layers panel to select it when the panel is open and layers are expanded. For more information, see [Chapter 7, “Layers, Masking, and Blending,” on page 129](#).



The Pointer tool selects objects when you click the objects or drag a selection area around them.



The Subselection tool selects an individual object in a group or the points of a vector object.



The Select Behind tool selects an object that is behind another object.



The Export Area tool selects an area to be exported as a separate file.

For information about selecting specific areas of pixels in a bitmap image, see [“Selecting pixels” on page 10](#).

Using the Pointer tool

The Pointer tool selects objects when you click them or when you drag a selection area around all or part of the objects.

To select an object by clicking, do one of the following:

- Move the Pointer tool over the object's path or bounding box and click.
- Click the object's stroke or fill.
- Select the object in the Layers panel.

Tip: To preview what you would select if you were to click on an object beneath the pointer on the canvas, choose the Mouse Highlight option in the Editing tab of the Preferences dialog box. For more about preferences, see [“Setting preferences” on page 281](#).

To select objects by dragging:

- Drag the Pointer tool to include one or more objects in the selection area.



Using the Subselection tool

You use the Subselection tool to select, move, or modify points on a vector path or an object that is part of a group.

To move or modify objects with the Subselection tool:

- 1 Choose the Subselection tool.
- 2 Make a selection.
Selection handles appear.
- 3 Do one of the following:
 - To modify an object, drag one of its points or selection handles.
 - To move the entire object, drag anywhere in the object except a point or selection handle.

Using the Select Behind tool

When working with graphics that contain multiple objects, you can use the Select Behind tool to select an object that is hidden or obscured by other objects.

To select an object that is behind other objects:

- Click the Select Behind tool repeatedly over the stacked objects, progressing through the objects top to bottom in stacking order until you select the object you want.

Note: You also can select a hard-to-reach object by clicking it in the Layers panel when the layers are expanded.

Selection information in the Property inspector

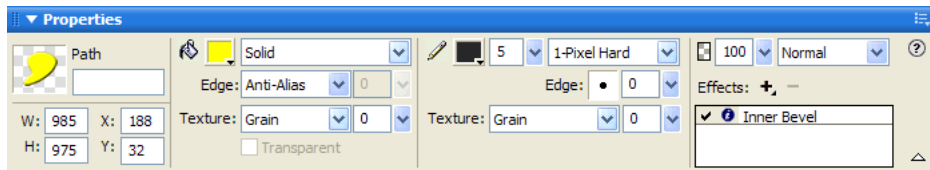
Whenever you select an object, the Property inspector identifies the selection. The upper left area of the Property inspector contains the following information about the selection:

- A description of the item being inspected
- A text box to enter a name for that item

Note: The name appears in the title bar of the document whenever you select this item. For slices and buttons, the name is the filename when exported.

- The number of objects when more than one object is selected

Note: If the status bar is turned on (Windows only), selected objects are also identified in the status bar at the bottom of the document window.



The Property inspector also displays information and settings for the object type selected. For example, when you select a vector path, the Property inspector displays vector path properties, such as stroke width and color.

Modifying a selection

After you select a single object, you can add objects to the selection and deselect objects that are selected. Using a single command, you can select or deselect everything on every layer in a document. You can also hide the selection path so that you can edit a selected object while viewing it as it will appear on the web or in print.

To add to a selection:

- Hold down Shift while clicking additional objects with the Pointer, Subselection, or Select Behind tool.

To deselect an object while leaving other objects selected:

- Hold down Shift while clicking the selected object.

To select everything on every layer in the document:

- Choose Select > Select All.

Note: Select All does not select hidden objects.

To deselect all selected objects:

- Choose Select > Deselect.

Note: You must deselect the Single Layer Editing preference to select all visible objects on all layers in a document. When you choose the Single Layer Editing preference, only objects on the current layer are selected. For more information, see [“Organizing layers” on page 131](#).

To hide the path selection feedback of a selected object:

- Choose View > Hide Edges.

Note: You can use the Layers panel or the Property inspector to identify the selected object when the outline and points are hidden.

To hide selected objects:

- Choose View > Hide Selection.

Note: Hidden objects are not exported. (This does not apply to slice and hotspot web objects on the Web Layer.)

To show all objects:

- Choose View > Show All.

Note: To hide objects whether they are selected or not, you can click or drag along the Eye column in the Layers panel.

Selecting pixels

You can edit pixels over an entire canvas or choose one of the selection tools to constrain your editing to a particular area of an image:



The Marquee tool selects a rectangular area of pixels in an image.



The Oval Marquee tool selects an elliptical area of pixels in an image.



The Lasso tool selects a freeform area of pixels in an image.



The Polygon Lasso tool selects a straight-edged freeform area of pixels in an image.



The Magic Wand tool selects an area of similarly colored pixels in an image.

The pixel selection tools draw selection marquee that define the area of selected pixels. After you draw the selection marquee, you can manipulate it by moving it, adding to it, or basing another selection on it. You can edit the pixels inside the selection, apply filters to the pixels, or erase pixels without affecting the pixels beyond the selection. You can also create a floating selection of pixels that you can edit, move, cut, or copy.

Bitmap selection tool options

When you choose the Marquee, Oval Marquee, Lasso, Polygon Lasso, or Magic Wand tool, the Property inspector displays three Edge options for the tool:

Hard creates a marquee selection with a defined edge.

Anti-alias prevents jagged edges in the marquee selection.

Feather lets you soften the edge of the pixel selection.

You must set the Feather option before creating a feathered selection using a selection tool. You can feather existing selections using the Feather command in the Select menu. For more information, see [“Feathering a pixel selection” on page 16](#).

When you choose the Marquee or Oval Marquee, the Property inspector also displays three style options:

Normal lets you create a marquee in which the height and width are independent of each other.

Fixed Ratio constrains the height and width to defined ratios.

Fixed Size sets the height and width to a defined dimension.

Note: The Magic Wand tool also has a Tolerance setting. For more information, see [“Selecting areas of similar color” on page 12](#).

Creating pixel selection marquees

The Marquee, Oval Marquee, and Lasso tools in the Bitmap section of the Tools panel allow you to select specific pixel areas of a bitmap image by drawing a marquee around them.

To select a rectangular or elliptical area of pixels:

- 1 Choose the Marquee or Oval Marquee tool.
- 2 Set the Style and Edge options in the Property inspector. For more information, see [“Bitmap selection tool options” on page 11](#).
- 3 Drag to draw a selection marquee, which defines the pixel selection.
Hold down Shift as you drag the Marquee or Oval Marquee tool to draw square or circular marquees. To draw a marquee from a center point, deselect any other active marquees, and then hold down Alt (Windows) or Option (Macintosh) while you draw.

To select a freeform area of pixels:

- 1 Choose the Lasso tool.
- 2 Choose an Edge option in the Property inspector. For more information, see [“Bitmap selection tool options” on page 11](#).
- 3 Drag the pointer around the pixels you want to select.

Plotting points to create a marquee selection

The Polygon Lasso tool allows you to select specific pixels in a bitmap image by clicking repeatedly around the perimeter of the pixel area you want to select.

To select a polygonal area of pixels:

- 1 Choose the Polygon Lasso tool.
- 2 Choose an Edge option in the Property inspector. For more information, see [“Bitmap selection tool options” on page 11](#).
- 3 Click to plot points around the perimeter of the object or area to outline the selection.
Hold down Shift to constrain Polygon Lasso marquee segments to 45° increments.
- 4 Do one of the following to close the polygon:
 - Click the starting point.
 - Double-click in the workspace.

Selecting areas of similar color

The Magic Wand tool allows you to select areas of pixels that are similar in color. By adjusting the Magic Wand’s Tolerance and Edge options in the Property inspector, you can control how the Magic Wand selects pixels.

To select an area of pixels of similar color range:

- 1 Choose the Magic Wand tool.
- 2 Choose an Edge option in the Property inspector. For more information, see [“Bitmap selection tool options” on page 11](#).
- 3 Set the tolerance level by dragging the tolerance slider in the Property inspector.
Tolerance represents the tonal range of colors that are selected when you click a pixel with the Magic Wand. If you enter **0** and click a pixel, only adjacent pixels of exactly the same tone are selected. If you enter **65**, a wider range of tones is selected.
- 4 Click the area of color you want to select.

A marquee appears around the selected range of pixels.



Pixels selected with a lower tolerance (above), then a higher tolerance (below)

To select similar colors throughout the document:

- 1 Select an area of color with a marquee or lasso tool, or with the Magic Wand tool.
- 2 Choose Select > Select Similar.

One or more marquees show all areas containing the selected range of pixels, according to the current Tolerance setting in the Property inspector for the Magic Wand tool.

Note: To adjust the tolerance for the Select Similar command, choose the Magic Wand tool and then change the Tolerance setting in the Property inspector before using the command.

Removing a selection marquee

You can remove a selection marquee without affecting the document.

To remove a marquee, do one of the following:

- Draw another marquee.
- Click outside the current selection with a marquee or lasso tool.
- Press Escape.
- Choose Select > Deselect.

Adjusting selection marquees

After selecting pixels with a marquee or lasso tool, you can edit or move the marquee border without affecting the pixels beneath it. You can manually add pixels to or delete pixels from a marquee border using modifier keys.

In addition, you can expand or contract the marquee border by a specified amount, select an additional area of pixels around the existing marquee, or smooth the border of the marquee.

Moving a marquee

You can move a marquee to place it over a different area of pixels.

To move the marquee, do one of the following:

- Drag the marquee with a marquee or lasso tool or the Magic Wand tool.
- Use the arrow keys to nudge the marquee in 1-pixel increments.
- Press Shift and use the arrow keys to move the marquee in 10-pixel increments.

Adjusting a marquee selection with the Spacebar

You can easily reposition a marquee as you draw it by pressing the Spacebar while drawing.

To reposition a selection with the Spacebar:

- 1 Begin dragging to draw the selection.
- 2 Without releasing the mouse button, hold down the Spacebar.
- 3 Drag the marquee to another location on the canvas.
- 4 While still holding down the mouse button, release the Spacebar.
- 5 Continue dragging to draw the selection.

Adding to a pixel selection

After drawing a selection marquee with any bitmap selection tool, you can add to the selection with the same tool or another bitmap selection tool.

To add to an existing pixel selection:

- 1 Choose any bitmap selection tool.
 - 2 Hold down Shift and draw additional selection marquees.
 - 3 Repeat steps 1 and 2 with any bitmap selection tool to continue adding to the selection.
- Overlapping marquees join to form a contiguous marquee.

Subtracting pixels from a selection

You can subtract pixels from a selection, or punch out parts of a selection, defining pixel areas inside the original marquee that will no longer be part of the selection.

To subtract pixels from a selection:

- Hold down Alt (Windows) or Option (Macintosh) and use a bitmap selection tool to select the pixel area to be punched out.

Creating a marquee from intersecting marquees

You can select pixels in an existing marquee by drawing a marquee that overlaps the original.

To select a pixel area defined by the intersection of two marquees:

- 1 Hold down Alt+Shift (Windows) or Option+Shift (Macintosh) while creating a new marquee selection that overlaps the original marquee.
- 2 Release the mouse button.

Only the pixels in the intersection area of the two marquees are selected.

Using thumbnails and modifier keys to modify pixel selections

With a bitmap selected, you can create a pixel selection on that bitmap using the opacity of any object or mask in the Layers panel. For more information about the Layers panel, see [“Working with layers” on page 129](#).

To create or replace a pixel selection on a selected bitmap using the opacity of an object:

- 1 In the Layers panel, position the pointer over the thumbnail of the object you want to use to create the pixel selection.
- 2 Hold down Control (Windows) or Command (Macintosh).



The pointer changes to indicate you are about to select the alpha channel, or the opaque area, of the object.

- 3 Click the thumbnail.

A new pixel selection is created on the selected bitmap.

To add to the current pixel selection:



- Control-Shift-click (Windows) or Command-Shift-click (Macintosh) the thumbnail of an object in the Layers panel to add the shape of its opaque area to the current pixel selection.

Tip: When you position the pointer over the thumbnail and hold down the specified modifier keys, the pointer indicates that you are about to add to the pixel selection.

To subtract from the current pixel selection:



- Control-Alt-click (Windows) or Command-Option-click (Macintosh) the thumbnail of an object in the Layers panel to subtract the shape of its opaque area from the current pixel selection.

Tip: When you position the pointer over the thumbnail and hold down the specified modifier keys, the pointer indicates that you are about to subtract from the pixel selection.

To create a pixel selection on a selected bitmap from the intersection of overlapping objects:



- 1 Control-click (Windows) or Command-click (Macintosh) an object's thumbnail to select its alpha channel, or opaque area.
- 2 Control-Shift-Alt-click (Windows) or Command-Shift-Option-click (Macintosh) another object.

A pixel selection is created on the selected bitmap from the intersection of the opaque areas of the two overlapping objects.

Tip: When you position the pointer over the thumbnail and hold down the specified modifier keys, the pointer indicates that you are about to create a pixel selection from the intersection of the opaque areas of two overlapping objects.

Creating an inverse pixel selection

Starting with a current pixel selection, you can create another pixel selection that selects all the pixels that are not currently selected. You can use this method to select and then erase all pixels surrounding the original selection, for example.

To create an inverse pixel selection:

- 1 Make a pixel selection using any bitmap selection tool.
- 2 Choose Select > Inverse Selection.
All pixels that were not in the original selection are now selected.

Feathering a pixel selection

Feathering creates a see-through effect for the selected pixels. When using the Feather command, you can try out various feather amounts and view the results before deselecting the pixels. You can also feather a selection by setting a feather amount in the Property inspector before using a bitmap selection tool. For more information, see [“Bitmap selection tool options” on page 11](#).

To feather a pixel selection:

- 1 Choose Select > Feather.
- 2 Enter a Feather amount in the Feather dialog box.
The selection marquee changes size to reflect the feather amount.
- 3 If necessary, change the number in the Feather dialog box to adjust the feather amount.
- 4 Click OK.

Tip: To view the appearance of the feathered selection without the surrounding pixels, choose Select > Select Inverse, and then press Delete. You can then use the History panel or Edit > Undo to try again.

Expanding or contracting a marquee

After you draw a marquee to select pixels, you can expand or contract its border.

To expand the border of a marquee:

- 1 After drawing the marquee, choose Select > Expand Marquee.
- 2 Enter the number of pixels by which you want to expand the border of the marquee, and click OK.

To contract the border of a marquee:

- 1 After drawing the marquee, choose Select > Contract Marquee.
- 2 Enter the number of pixels by which you want to contract the border of the marquee, and click OK.

Selecting an area around an existing marquee

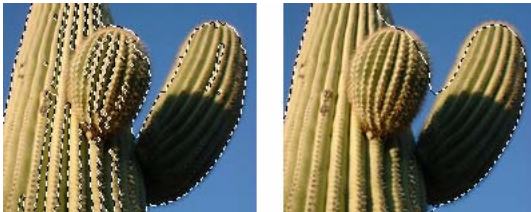
You can create an additional marquee to frame an existing marquee at a specified width. This lets you create special graphics effects, such as feathering the edges of a pixel selection.

To select an area around an existing marquee:

- 1 After drawing a marquee, choose **Select > Border Marquee**.
- 2 Enter the width of the marquee that you want to place around the existing marquee, and click **OK**.

Smoothing the border of a marquee

You can eliminate excess pixels along the edges of a pixel selection. This is useful if excess pixels appear along the border of a pixel selection or marquee after you use the Magic Wand tool.



A pixel selection before and after smoothing

To smooth the border of a marquee:

- 1 Choose **Select > Smooth Marquee**.
- 2 Enter a sample radius to specify the desired degree of smoothing, and click **OK**.

Transferring a marquee selection

You can transfer a marquee selection from one bitmap to another bitmap object on the same layer or one on a different layer. You can also transfer the marquee selection to a mask.

To transfer a marquee selection to another bitmap object:

- 1 Make a selection by drawing the marquee.
- 2 In the **Layers** panel, select a different bitmap object on the same layer or an object on a different layer.

The marquee is transferred to that object.

Note: Fireworks treats masks and masked objects as separate objects. For more information on masks, see [“Masking images” on page 134](#).

Saving and restoring marquee selections

You can save the size, shape, and location of a selection to reapply later.

To save a marquee selection:

- Choose Select > Save Bitmap Selection.

To restore a marquee selection:

- Choose Select > Restore Bitmap Selection.

Note: You can save only one selection at a time.

Creating and moving a floating pixel selection

When you drag a marquee to a new location, the marquee itself moves. If you want to move, edit, cut, or copy a selection of pixels, you must first make the pixels a floating selection.

To create a floating pixel selection:

- 1 Make a pixel selection with a bitmap selection tool.
- 2 Do one of the following:
 - Hold down Control (Windows) or Command (Macintosh) and drag the selection using any tool from the Bitmap section of the Tools panel.
 - Choose the Pointer tool and drag the selection.

To move a floating selection, do one of the following:

- Drag the floating selection with the Pointer tool or any bitmap selection tool.
- If a nonselection bitmap tool is active, hold down Control (Windows) or Command (Macintosh) and drag the floating selection.
- Use the arrow keys or Shift+arrow keys.

When you deselect the floating pixel selection or choose any vector or web tool, the floating selection becomes part of the current bitmap object.

Inserting a new bitmap by cutting or copying

You can insert a new bitmap based on a pixel selection into the current layer of a document by cutting or copying the selected pixels.

To insert a new bitmap by cutting and pasting a pixel selection:

- 1 Select an area of pixels using a pixel selection tool.
- 2 Choose Edit > Insert > Bitmap via Cut.

A new bitmap object based on the pixel selection is created in the current layer, and the selected pixels are removed from the original bitmap object. In the Layers panel, a thumbnail of the new bitmap appears in the current layer, above the object from which it was cut.

To insert a new bitmap by copying and pasting a pixel selection:

- 1 Select an area of pixels using a pixel selection tool.
- 2 Choose Edit > Insert > Bitmap via Copy.

A new bitmap object based on the pixel selection is created in the current layer, and the selected pixels remain in the original bitmap object. In the Layers panel, a thumbnail of the new bitmap appears in the current layer, above the object from which it was copied.

Editing selected objects

Fireworks gives you a number of ways to edit selected objects: you can move objects on the canvas or from application to application, you can replicate objects with the Clone and Duplicate commands, or you can remove objects from the workspace altogether.

To move a selection, do one of the following:

- Drag it with the Pointer, Subselection, or Select Behind tool.
- Press any arrow key to move the selection in 1-pixel increments.
- Hold down Shift while pressing any arrow key to move the selection in 10-pixel increments.
- In the Property inspector, enter the X and Y coordinates for the location of the top left corner of the selection.
- Enter the object's *x* and *y* coordinates in the Info panel. If the X and Y boxes aren't visible, drag the bottom edge of the panel.

To move or copy selected objects by pasting:

- 1 Select an object or multiple objects.
- 2 Choose Edit > Cut or Edit > Copy.
- 3 Choose Edit > Paste.

To duplicate one or more selected objects:

- Choose Edit > Duplicate.

As you repeat the command, duplicates of the selected object appear in a cascading arrangement from the original, 10 pixels lower and 10 pixels to the right of the previous duplicate. The most recently duplicated object becomes the selected object.

Note: You cannot use the Duplicate or Clone commands with bitmap selections. Use the Subselection tool or Rubber Stamp tool to duplicate parts of a bitmap image. For more information about using the Subselection tool, see the following procedures. For more information about using the Rubber Stamp tool, see ["Retouching bitmaps" on page 34](#).

To duplicate a selected object by dragging:

- Alt-drag (Windows) or Option-drag (Macintosh) the object using the Pointer tool.

To duplicate a pixel selection, do one of the following:

- Drag the pixel selection using the Subselection tool.
- Alt-drag (Windows) or Option-drag (Macintosh) the object using the Pointer tool.

To clone a selection:

- Choose Edit > Clone.

The clone of the selection is stacked precisely in front of the original and becomes the selected object.

Note: To move a selected clone away from the original with pixel-by-pixel precision, use the arrow keys or Shift+arrow keys. This is a convenient way to maintain a specific distance between clones or maintain the vertical or horizontal alignment of the clones.

To delete selected objects, do one of the following:

- Press Delete or Backspace.
- Choose Edit > Clear.
- Choose Edit > Cut.
- Right-click (Windows) or Control-click (Macintosh) the object and choose Edit > Cut from the context menu.

To cancel or deselect a selection, do one of the following:

- Choose Select > Deselect.
- Click anywhere in the image outside of the selected area if you are using the Marquee, Oval Marquee, or Lasso tool.
- Press Escape.

Transforming and distorting selected objects and selections

You can transform a selected object or group, or a pixel selection, using the Scale, Skew, and Distort tools and menu commands:



Scale enlarges or reduces an object.

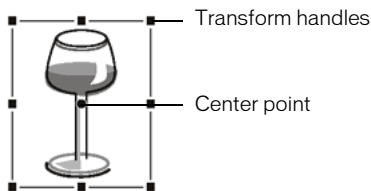


Skew slants an object along a specified axis.

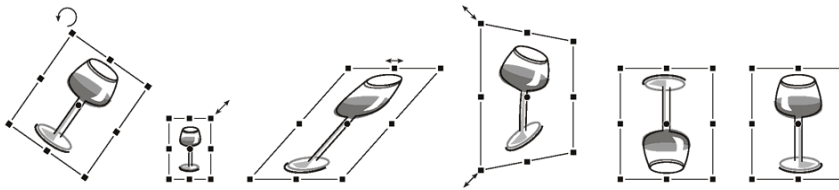


Distort moves the sides or corners of an object in the direction you drag a selection handle while the tool is active. This is helpful in creating a 3D look.

When you choose any transformation tool or Transform menu command, Fireworks displays transform handles around selected objects.



Original object



Object rotated, scaled, skewed, distorted, and flipped vertically and horizontally

To transform selected objects using the transform handles:

- 1 Choose a transformation tool.
As you move the pointer on or near the selection handles, the pointer changes to indicate the current transformation.
- 2 Do one of the following to transform the objects:
 - Place the pointer near a corner point and then drag to rotate.
 - Drag a transform handle to transform according to the active transformation tool.
- 3 Double-click inside the window or press Enter to apply your changes.

Resizing (scaling) objects

Scaling an object enlarges or reduces it horizontally, vertically, or in both directions.

To scale a selected object:

- 1 Do one of the following to display the transform handles:



- Choose the Scale tool.
- Choose Modify > Transform > Scale.

- 2 Drag the transform handles:

- To scale the object both horizontally and vertically, drag a corner handle. Proportions are constrained if you press the Shift key as you scale.
- To scale the object horizontally or vertically, drag a side handle.
- To scale the object from the center, press Alt while dragging any handle.

Note: You can also resize selected objects by entering dimensions in the Property inspector. For more information, see [“Transforming objects numerically” on page 24](#).

Rotating objects

When rotated, an object pivots on its center point. You rotate an object by choosing a preset angle or by placing the pointer outside an object’s transform handles to display the rotation pointer before you drag.

Note: You can also rotate the document canvas. For more information, see Fireworks Help.

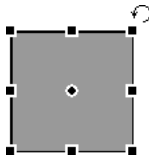
To rotate a selected object 90° or 180°:

- Choose Modify > Transform and choose a Rotate command from the submenu.

To rotate a selected object by dragging:



- 1 Choose any transformation tool.
- 2 Move the pointer outside the object until the rotation pointer appears.



- 3 Drag to rotate the object.

Tip: To constrain rotation to 15° increments relative to the horizon, Shift-drag the pointer.

- 4 Double-click inside the window or press Enter to apply your changes.

To relocate the axis of rotation:

- Drag the center point away from the center.

To reset the axis of rotation to the center of the selection, do one of the following:

- Double-click the center point
- Press Escape to deselect the object, then select it again.

Flipping objects

You can flip an object across its vertical or horizontal axis without moving its relative position on the canvas.

To flip a selected object:

- Choose Modify > Transform > Flip Horizontal or Flip Vertical.

Skewing objects

Skewing an object transforms it by slanting it along the horizontal or vertical axis, or both axes.

To skew a selected object:

- 1 Do one of the following to display the transform handles:



- Choose the Skew tool.
- Choose Modify > Transform > Skew.

- 2 Drag a handle to skew the object.

- 3 Double-click inside the window or press Enter to remove the transform handles.

To achieve the illusion of perspective:

- Drag a corner point.

Distorting objects

You change the size and proportions of an object by dragging a selection handle with the Distort tool.

To distort a selected object:

- 1 Do one of the following to display the transform handles:



- Choose the Distort tool.
- Choose Modify > Transform > Distort.

- 2 Drag a handle to distort the object.

- 3 Double-click inside the window or press Enter to apply your changes.

Transforming objects numerically

Instead of dragging to scale, resize, or rotate an object, you can transform it by entering specific values.

To resize selected objects using the Property inspector or Info panel:

- Enter new width (W) or height (H) measurements.

Note: If the W and H boxes aren't visible in the Property inspector, click the expander arrow to see all properties.

To scale or rotate selected objects using Numeric Transform:

- 1 Choose Modify > Transform > Numeric Transform.
The Numeric Transform dialog box opens.
- 2 From the pop-up menu, choose the type of transformation to perform on the current selection: Scale, Resize, or Rotate.
- 3 Choose Constrain Proportions to maintain horizontal and vertical proportions when scaling or resizing a selection.
- 4 Choose Scale Attributes to transform the fill, stroke, and effects of the object along with the object itself.
- 5 Deselect Scale Attributes to transform the path only.
- 6 Type numeric values to transform the selection, then click OK.

Viewing transformation information in the Info panel

The Info panel lets you view numerical transformation information for the currently selected object. The information updates as you edit the object.

- For scaling and free transformations, the Info panel shows the width (W) and height (H) of the original object before transformation and the percentage of increase or decrease in width and height during the transformation.
- For skewing and distorting, the Info panel shows the skew angle in one-degree increments and the X and Y pointer coordinates during the transformation.

To view transformation information as you transform a selection:

- Choose Window > Info.

Organizing objects

When working with multiple objects in a single document, you can use several techniques to organize the document:

- You can group individual objects to treat them as one or protect each object's relationship to the others in the group.
- You can arrange objects behind or in front of other objects. The way objects are arranged is called the *stacking order*.
- You can align selected objects to an area of the canvas or to a vertical or horizontal axis.

Grouping objects

You can group individual selected objects and then manipulate them as if they were a single object. For example, after drawing the petals of a flower as individual objects, you can group them to select and move the entire flower as a single object.

You can edit groups without ungrouping them. You can select an individual object in a group for editing without ungrouping the objects. You can also ungroup the objects at any time.

To group two or more selected objects:

- Choose **Modify > Group**.

To ungroup selected objects:

- Choose **Modify > Ungroup**.

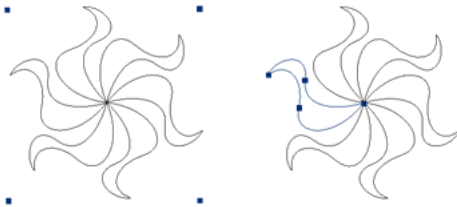
Selecting objects within groups

To work with individual objects within a group, you can either ungroup the objects or use the Subselection tool to select individual objects while leaving the group intact.



Subselection tool

Modifying the attributes of a subselected object changes only the subselected object, not the entire group. Moving a subselected object to another layer removes the object from the group.



Subselecting an object within a group

To select an object that is part of a group:

- Choose the Subselection tool and click the object or drag a selection area around it. To add objects to or remove them from the selection, hold down Shift as you click or drag.

To select the group that contains a subselected object, do one of the following:

- Right-click (Windows) or Control-click (Macintosh) anywhere in the group and choose **Select > Superselect** from the context menu.
- Choose **Select > Superselect**.

To select all objects within a selected group, do one of the following:

- Right-click (Windows) or Control-click (Macintosh) anywhere on the group and choose **Select > Subselect** from the context menu.
- Choose **Select > Subselect**.

Stacking objects

Within a layer, Fireworks stacks objects based on the order in which they were created, placing the most recently created object on the top of the stack. The stacking order of objects determines how they appear when they overlap.

Layers also affect the stacking order. For example, suppose a document has two layers named Layer 1 and Layer 2. If Layer 1 is listed below Layer 2 on the Layers panel, then everything on Layer 2 appears in front of everything on Layer 1. You can change the order of layers by dragging the layer in the Layers panel to a new position. For more information, see [“Organizing layers” on page 131](#).

To change the stacking order of a selected object or group within a layer:

- Choose Modify > Arrange > Bring to Front or Send to Back to move the object or group to the top or bottom of the stacking order.
- Choose Modify > Arrange > Bring Forward or Send Backward to move the object or group up or down one position in the stacking order.

If more than one object or group is selected, the objects move in front of or behind all unselected objects while maintaining their order relative to one another.

Aligning objects

The Align commands in the Modify menu give you a wide range of arrangement options, allowing you to do any of the following:

Align objects along a horizontal or vertical axis.

Align selected objects vertically along their right edge, center, or left edge, or horizontally along their top edge, center, or bottom edge.

Note: Edges are determined by the bounding boxes enclosing each selected object.

Distribute selected objects so that their centers or edges are evenly spaced.

You can apply one or more Align commands to selected objects.

To align selected objects, do one of the following:

- Choose Modify > Align > Left to align the objects to the leftmost selected object.
- Choose Modify > Align > Center Vertical to align the center points of the objects along a vertical axis.
- Choose Modify > Align > Right to align the objects to the rightmost selected object.
- Choose Modify > Align > Top to align the objects to the topmost selected object.
- Choose Modify > Align > Center Horizontal to align the center points of the objects along a horizontal axis.
- Choose Modify > Align > Bottom to align the objects to the bottommost selected object.

To evenly distribute the widths or heights of three or more selected objects:

- Choose Modify > Align > Distribute Widths or Modify > Align > Distribute Heights.

About arranging objects among layers

The Layers panel offers another dimension of organizational control. You can move selected objects from one layer to another by dragging the object thumbnail or the blue selection indicator in the Layers panel to another layer. For more information, see [“Organizing layers” on page 131](#).

CHAPTER 2

Working with Bitmaps

Bitmaps are graphics composed of small colored squares called pixels, which combine like the tiles of a mosaic to create an image. Examples of bitmap graphics include photographs, scanned images, and graphics created from paint programs. They are sometimes referred to as *raster images*.

Macromedia Fireworks MX 2004 combines the functionality of photo-editing, vector-drawing, and painting applications. You can create bitmap images by drawing and painting with bitmap tools, by converting vector objects to bitmap images, or by opening or importing images.

Fireworks has a powerful set of Live Effects for tone and color adjustment, as well as a number of ways to retouch your bitmap images, including cropping, feathering, and duplicating or cloning images. In addition, Fireworks has a set of image-retouching tools—Blur, Sharpen, Dodge, Burn, and Smudge.

For information on methods for selecting and transforming images and pixel areas, see Fireworks Help.

Working with bitmaps

The Bitmap section of the Tools panel contains bitmap selection and editing tools. To edit the pixels of a bitmap in your document, you can choose a tool from the Bitmap section. Unlike in previous versions of Fireworks, you do not need to deliberately switch between bitmap mode and vector mode, but you can still work with bitmaps, vector objects, and text. Switching to the appropriate mode is as simple as choosing a vector or bitmap tool from the Tools panel.

Note: Previous versions of Fireworks display a striped border around the canvas to indicate that Fireworks is in bitmap mode. If you prefer to see the familiar striped border when working with bitmaps, you can choose Bitmap Options > Display Striped Border from the Edit category of the Preferences dialog box.

Creating bitmap objects

You can create bitmap graphics by using the Fireworks bitmap drawing and painting tools, by cutting or copying and pasting pixel selections, or by converting a vector image into a bitmap object. Another way to create a bitmap object is to insert an empty bitmap image in your document and then draw, paint, or fill it.

When you create a new bitmap object, it is added to the current layer. In the Layers panel with layers expanded, you can see a thumbnail and name for each bitmap object under the layer on which it resides. Although some bitmap applications consider each bitmap object a layer, Fireworks organizes bitmap objects, vector objects, and text as separate objects that reside on layers. For more information, see [“Working with layers” on page 129](#).

To create a new bitmap object:

- 1 Choose the Brush or Pencil tool from the Bitmap section of the Tools panel.
- 2 Paint or draw with the Brush or Pencil tool to create bitmap objects on the canvas.

A new bitmap object is added to the current layer in the Layers panel. For more information on using the Pencil or Brush tools, see [“Drawing, painting, and editing bitmap objects” on page 31](#).

You can create a new empty bitmap, and then draw or paint pixels in the empty bitmap.

To create an empty bitmap object, do one of the following:



- Click the New Bitmap Image button in the Layers panel.
- Choose Edit > Insert > Empty Bitmap.
- Draw a selection marquee, starting in a blank area of the canvas, and fill it. For more information, see [“Creating pixel selection marquees” on page 11](#).

An empty bitmap is added to the current layer in the Layers panel. If the empty bitmap is deselected before any pixels have been drawn, imported, or otherwise placed on it, the empty bitmap object automatically disappears from the Layers panel and the document.

To cut or copy pixels and paste them as a new bitmap object:

- 1 Make a pixel selection using the Marquee tool, Lasso tool, or Magic Wand tool.
For more information, see [“Selecting pixels” on page 10](#).
- 2 Do one of the following:
 - Choose Edit > Cut, then Edit > Paste.
 - Choose Edit > Copy, then Edit > Paste.
 - Choose Edit > Insert > Bitmap via Copy to copy the current selection into a new bitmap.
 - Choose Edit > Insert > Bitmap via Cut to cut the current selection for placement into a new bitmap.

The selection appears in the Layers panel as an object on the current layer.

Note: You can also Right-click (Windows) or Control-click (Macintosh) a pixel marquee selection and choose a cut or copy option from the context menu. For more information about the Bitmap via Cut and Bitmap via Copy options, see [“Inserting a new bitmap by cutting or copying” on page 18](#).

To convert selected vector objects to a bitmap image, do one of the following:

- Choose Modify > Flatten Selection.
- Choose Flatten Selection from the Layers panel Options menu.

A vector-to-bitmap conversion is irreversible, except when Edit > Undo or undoing actions in the History panel is still an option. Bitmap images cannot be converted to vector objects.

Drawing, painting, and editing bitmap objects

The Bitmap section of the Tools panel contains tools for selecting, drawing, painting, and editing pixels in a bitmap image.

Drawing bitmap objects

You can use the Pencil tool to draw 1-pixel lines, either freehand lines or constrained, straight lines, much as you use a real pencil, with or without a ruler, to draw hard-edged lines. You can also zoom in on a bitmap and use the Pencil tool to edit individual pixels.

To draw an object with the Pencil tool:



- 1 Choose the Pencil tool.
- 2 Set tool options in the Property inspector:

Anti-aliased smooths the edges of the lines you draw.

Auto Erase uses the fill color when the Pencil tool is clicked over the stroke color.

Preserve Transparency restricts the Pencil tool to drawing only in existing pixels, not in transparent areas of a graphic.

- 3 Drag to draw. Shift-drag to constrain the path to a horizontal, vertical, or diagonal line.

Painting bitmap objects

You can use the Brush tool to paint a brush stroke using the color in the Stroke Color box, or you can use the Paint Bucket tool to change the color of selected pixels to the color in the Fill Color box. With the Gradient tool, you can fill bitmap or vector objects with a combination of colors in adjustable patterns.

To paint an object with the Brush tool:



- 1 Choose the Brush tool.
- 2 Set the stroke attributes in the Property inspector.
- 3 Drag to paint.

For more information about setting Brush tool options, see [“Working with strokes” on page 106](#).

To change the color of pixels to the color in the Fill Color box:



- 1 Choose the Paint Bucket tool.
- 2 Choose a color in the Fill Color box.
- 3 Set the tolerance value in the Property inspector.

Note: The tolerance determines how similar in color pixels must be to be filled. A low tolerance value fills pixels with color values similar to the pixel you click. A high tolerance fills pixels with a broader range of color values.

- 4 Click the image.
All pixels within the tolerance range change to the fill color.

To apply a gradient fill to a pixel selection:



- 1 Make the selection.
- 2 Choose the Gradient tool.
- 3 Set the fill attributes in the Property inspector.
- 4 Click the pixel selection to apply the fill.

The Paint Bucket and Gradient tools can also fill selected vector objects. For more information about creating, applying, and editing gradient fills, see [“Working with fills” on page 110](#).

Sampling a color to use as a stroke or fill color

With the Eyedropper tool, you can sample color from an image to designate a new stroke or fill color. You can sample the color of a single pixel, an average of color values within a 3-by-3-pixel area, or an average of color values within a 5-by-5-pixel area.

To sample a stroke or fill color:

- 1 If the correct attribute is not already active, do one of the following:
 - Click the stroke icon next to the Stroke Color box in the Tools panel to make it the active attribute.
 - Click the fill icon next to the Fill Color box in the Tools panel to make it the active attribute.

Note: Do not click the color box itself. If you do, the eyedropper pointer that appears is not the Eyedropper tool. For information on the color box eyedropper pointer, see [“Sampling colors from a color pop-up window” on page 105](#).



- 2 Open a Fireworks document or any file that Fireworks can open. For more information, see [Chapter 9, “Slices, Rollovers, and Hotspots,” on page 167](#).
- 3 Choose the Eyedropper tool from the Bitmap section of the Tools panel. Set the Color Averaging Sample setting in the Property inspector:
 - 1-pixel** creates a stroke or fill color from a single pixel.
 - 3x3 pixels** creates a stroke or fill color from the average of color values in a 3-by-3-pixel area.
 - 5x5 pixels** creates a stroke or fill color from the average of color values in a 5-by-5-pixel area.
- 4 Click the Eyedropper tool anywhere in the document.
The sampled color appears in all Stroke Color or Fill Color boxes throughout Fireworks.

Erasing bitmap objects

You can use the Eraser tool to remove pixels. By default, the Eraser tool pointer represents the size of the current eraser, but you can change the size and appearance of the pointer in the Preferences dialog box. For more information, see [“Editing preferences” on page 282](#).



Eraser tool

To erase pixels in a selected bitmap object or pixel selection:

- 1 Choose the Eraser tool.
- 2 In the Property inspector, choose the round or square eraser shape.
- 3 Drag the Edge slider to set the softness of the eraser's edge.
- 4 Drag the Size slider to set the size of the eraser.
- 5 Drag the Eraser Opacity slider to set the degree of opacity.
- 6 Drag the Eraser tool over the pixels you want to erase.

Feathering pixel selections

Feathering blurs the edges of a pixel selection and helps the selected area blend with the surrounding pixels. Feathering is useful when you copy a selection and paste it onto another background.



To feather the edges of a pixel selection as you make a pixel selection:

- 1 Choose a bitmap selection tool from the Tools panel.
- 2 Choose Feather from the Edge pop-up menu in the Property inspector.
- 3 Drag the slider to set the number of pixels you want to blur along the edge of the selection.
- 4 Make a selection.

To feather the edges of a pixel selection from the menu bar:

- 1 Choose Select > Feather.
- 2 Type a value in the Feather Selection dialog box to set the feather radius, and click OK.
The radius value determines the number of pixels that are feathered on each side of the selection border.

Retouching bitmaps

Fireworks provides a wide range of tools to help you retouch your images. You can alter an image's size, reduce or sharpen its focus, or copy and “stamp” a part of it to another area.



The Rubber Stamp tool lets you copy or clone one area of an image to another.



The Blur tool decreases the focus of selected areas in an image.



The Smudge tool picks up color and pushes it in the direction that you drag in an image.



The Sharpen tool sharpens areas in an image.



The Dodge tool lightens parts of an image.



The Burn tool darkens parts of an image.



The Red-eye Removal tool reduces the appearance of red eye in photos



The Replace Color tool paints over one color with another color

Cloning pixels

The Rubber Stamp tool clones an area of a bitmap image so that you can stamp it elsewhere in the image. Cloning pixels is useful when you want to fix a scratched photograph or remove dust from an image; you can copy a pixel area of a photo and replace the scratch or dust spot with the cloned area.

To clone portions of a bitmap image:

- 1 Choose the Rubber Stamp tool.
- 2 Click an area to designate it as the source, or the area you want to clone.

The sampling pointer becomes a cross-hair pointer.

Note: To designate a different area of pixels to clone, you can Alt-click (Windows) or Option-click (Macintosh) another area of pixels to designate it as the source.

- 3 Move to a different part of the image and drag the pointer.

You will see two pointers. The first one, the source of the cloning, is in the shape of a cross hair. For more information, see [“Editing preferences” on page 282](#).

Depending upon the brush preferences you’ve selected, the second pointer is a rubber stamp, a cross hair, or a blue circle. As you drag the second pointer, pixels beneath the first pointer are copied and applied to the area beneath the second.

To set Rubber Stamp tool options:

- 1 Choose the Rubber Stamp tool.
- 2 Choose from among the following options in the Property inspector:

Size determines the size of the stamp.

Edge determines the softness of the stroke (100% is hard; 0% is soft).

Source Aligned affects the sampling operation. When Source Aligned is selected, the sampling pointer moves vertically and horizontally in alignment with the second. When Source Aligned is deselected, the sample area is fixed, regardless of where you move and click the second pointer.

Use Entire Document samples from all objects on all layers. When this option is deselected, the Rubber Stamp tool samples from the active object only.

Opacity determines how much of the background can be seen through the stroke.

Blend Mode affects how the cloned image affects the background.

To duplicate a pixel selection, do one of the following:

- Drag the pixel selection with the Subselection tool.
- Alt-drag (Windows) or Option-drag (Macintosh) the pixel selection using the Pointer tool.

Blurring, sharpening, and smudging pixels

The Blur and Sharpen tools affect the focus of pixels. The Blur tool lets you emphasize or deemphasize parts of an image by selectively blurring the focus of elements, much as a photographer controls depth of field. The Sharpen tool can be useful for repairing scanning problems or out-of-focus photographs. The Smudge tool lets you gently blend colors, as when creating a reflection of an image.

To blur or sharpen an image:

- 1 Choose the Blur or Sharpen tool.
- 2 Set brush options in the Property inspector:
 - Size** sets the size of the brush tip.
 - Edge** specifies the softness of the brush tip.
 - Shape** sets a round or square brush tip shape.
 - Intensity** sets the amount of blurring or sharpening.
- 3 Drag the tool over the pixels to be sharpened or blurred.

Tip: Hold down Alt (Windows) or Option (Macintosh) to change from one tool behavior to the other.

To smudge colors in an image:

- 1 Choose the Smudge tool.
- 2 Set the tool options in the Property inspector:
 - Size** specifies the size of the brush tip.
 - Shape** sets a round or square brush tip shape.
 - Edge** specifies the softness of the brush tip.
 - Pressure** sets the intensity of the stroke.
 - Smudge Color** allows you to smudge using a specified color at the beginning of each stroke. If this option is deselected, the tool uses the color under the tool pointer.
 - Use Entire Document** smudges using color data from all objects on all layers. If this option is deselected, the Smudge tool uses colors from the active object only.
- 3 Drag the tool over the pixels to be smudged.

Lightening and darkening pixels

You use the Dodge or Burn tool to lighten or darken parts of an image, respectively. This is similar to the darkroom technique of increasing or decreasing light exposure as the photograph is developed.

To lighten or darken parts of an image:

- 1 Choose the Dodge tool to lighten parts of an image or the Burn tool to darken parts of an image.
- 2 Set the brush options in the Property inspector:
 - Size** sets the size of the brush tip.
 - Shape** sets a round or square brush tip shape.
 - Edge** sets the softness of the brush tip.
- 3 Set the exposure in the Property inspector.

The exposure ranges from 0% to 100%. For a lessened effect, specify a lower percentage value; for a stronger effect, specify a higher value.
- 4 Set the range in the Property inspector:
 - Shadows** changes mainly the dark portions of the image.
 - Highlights** changes mainly the light portions of the image.
 - Midtones** changes mainly the middle range per channel in the image.
- 5 Drag over the part of the image you want to lighten or darken.

Hold down Alt (Windows) or Option (Macintosh) as you drag the tool to temporarily switch from the Dodge tool to the Burn tool or from the Burn tool to the Dodge tool.

Removing red-eye from photos

In some photographs, the subjects' pupils are an unnatural shade of red. You can use the Red-eye Removal tool to correct this red-eye effect. The Red-eye Removal tool paints red areas of a photograph only, replacing reddish colors with grays and blacks.



Original photograph; after using the Red-eye Removal tool

To correct the red-eye effect in a photograph:



- 1 Choose the Red-eye Removal tool from its pop-up menu.
- 2 Set the stroke attributes in the Property inspector:
 - Size** sets the size of the brush tip.
 - Shape** sets a round or square brush tip shape.
 - Tolerance** determines the range of hues to replace (0 replaces only red; 255 replaces all hues that contain red).
 - Strength** sets the darkness of the grays used to replace reddish colors.
- 3 Drag or click the red pupils in the photograph.

Replacing colors

The Replace Color tool lets you select a color and paint over that color with a different color.



Original photograph; after using the Replace Color tool

To replace one color with another:



- 1 Choose the Replace Color tool from its pop-up menu.
- 2 Click the Change color well in the Property inspector to select the color probe, and choose a color from the pop-up menu, or click in the image to choose the color you want to replace.
- 3 Click the To color well in the Property inspector to select the color probe, then choose a color from the pop-up menu, or click in the image to choose the color you want to use as a replacement.
- 4 Set the other stroke attributes in the Property inspector:
 - Size** sets the size of the brush tip.
 - Shape** sets a round or square brush tip shape.
 - Tolerance** determines the range of colors to replace (0 replaces only the To color; 255 replaces all colors similar to the To color).
 - Strength** determines how much of the Change color is replaced.
 - Colorize** replaces the Change color with the To color. Deselect Colorize to tint the Change color with the To color, leaving some of the Change color intact.
- 5 Drag the tool over the color you want to replace.

Cropping a selected bitmap

You can isolate a single bitmap object in a Fireworks document and crop only that bitmap object, leaving other objects on the canvas intact.

To crop a bitmap image without affecting other objects in the document:

- 1 Select a bitmap object by clicking the object on the canvas or by clicking its thumbnail in the Layers panel, or draw a selection marquee using a bitmap selection tool.

- 2 Choose Edit > Crop Selected Bitmap.

The crop handles appear around the entire selected bitmap or around the selection marquee, if you drew one in step 1.

- 3 Adjust the crop handles until the bounding box surrounds the area of the bitmap image that you want to keep.

Note: To cancel a crop selection, press Escape.



Bounding box

- 4 Double-click inside the bounding box or press Enter to crop the selection.

Every pixel in the selected bitmap outside the bounding box is removed, but other objects in the document remain.

Adjusting bitmap color and tone

Fireworks has color- and tone-adjustment filters to help you improve and enhance the colors in your bitmap images. You can adjust the contrast and brightness, the tonal range, and the hue and color saturation of your images.

Applying filters as Live Effects from the Property inspector is nondestructive. Live Effects do not permanently alter the pixels; you can remove or edit them anytime.

If you prefer to apply filters in an irreversible, permanent way, you can choose them from the Filters menu. However, Macromedia recommends that you use filters as Live Effects whenever possible.

You can apply filters from the Filters menu to pixel selections, but not Live Effects. You can, however, define an area of a bitmap and create a separate bitmap from it, and then apply a Live Effect to it.

If you apply a filter to a selected vector object using the Filters menu, Fireworks converts the selection to a bitmap.

To apply a Live Effect to an area defined by a bitmap selection marquee:

- 1 Choose a bitmap selection tool and draw a selection marquee.
- 2 Choose Edit > Cut.
- 3 Choose Edit > Paste.

Fireworks pastes the selection exactly where the pixels were originally located, but the selection is now a separate bitmap object.

- 4 Click the thumbnail of the new bitmap object in the Layers panel to select the bitmap object.
- 5 Apply a Live Effect from the Property inspector.

Fireworks applies the Live Effect only to the new bitmap object, simulating the application of a filter to a pixel selection.

Note: Although Live Effects are more flexible, large numbers of Live Effects in a document can slow down Fireworks performance. For more information, see Fireworks Help.

Adjusting tonal range

You can use the Levels and Curves features to adjust a bitmap's tonal range. With Levels, you can correct bitmaps that contain a high concentration of pixels in the highlights, midtones, or shadows. Or you can use Auto Levels and let Fireworks adjust the tonal range for you. If you want more precise control over a bitmap's tonal range, you can use the Curves feature, which lets you adjust any color along the tonal range without affecting other colors.

Using the Levels feature

A bitmap with a full tonal range should have an even number of pixels in all areas. The Levels feature corrects bitmaps with a high concentration of pixels in the highlights, midtones, or shadows.

Highlights corrects an excess of light pixels, which makes the image look washed out.

Midtones corrects an excess of pixels in the midtones, which makes the image bland.

Shadows corrects an excess of dark pixels, which hides much of the detail.

The Levels feature sets the darkest pixels as black and the lightest pixels as white, then redistributes the midtones proportionally. This produces an image with the sharpest detail in all of its pixels.



Original with pixels concentrated in the highlights; after adjusting with Levels

You can use the Histogram in the Levels dialog box to view the pixel distribution of a bitmap. The Histogram is a graphical representation of the distribution of pixels in the highlights, midtones, and shadows.

The Histogram helps you determine the best method of correcting an image's tonal range. A high concentration of pixels in the shadows or highlights indicates that you could improve the image by applying the Levels or Curves feature.

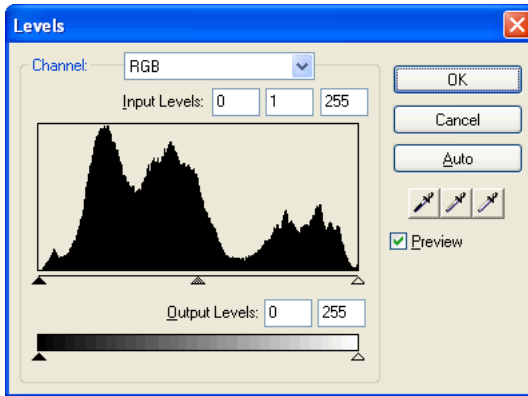
The horizontal axis represents color values from darkest (0) to brightest (255). Read the horizontal axis from left to right: the darker pixels are on the left, the midtone pixels are in the center, and the brighter pixels are on the right.

The vertical axis represents the number of pixels at each brightness level. Typically, you should adjust the highlights and shadows first. Adjusting the midtones second lets you improve their brightness value without affecting the highlights and shadows.

To adjust highlights, midtones, and shadows:

- 1 Select the bitmap image.
- 2 Do one of the following to open the Levels dialog box:
 - In the Property inspector, click the Add Effects button, and then choose Adjust Color > Levels from the Add Effects pop-up menu.
 - Choose Filters > Adjust Color > Levels.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).



Levels dialog box

Tip: To view your changes in the workspace, choose Preview in the dialog box. As you make changes, the image updates automatically.

- 3 In the Channel pop-up menu, choose whether you want to apply changes to individual color channels (Red, Blue, or Green) or to all color channels (RGB).
- 4 Drag the Input Levels sliders under the Histogram to adjust the highlights, midtones, and shadows:
 - The right slider adjusts the highlights using values from 255 to 0.
 - The center slider adjusts the midtones using values from 10 to 0.
 - The left slider adjusts the shadows using values from 0 to 255.

As you move the sliders, the values are automatically entered in the Input Levels boxes.

Note: The shadow value cannot be higher than the highlight value; the highlight value cannot be lower than the shadow value; and the midtones must fall between the shadow and highlight settings.

- 5 Drag the Output Levels sliders to adjust the contrast values in the image:
 - The right slider adjusts the highlights using values from 255 to 0.
 - The left slider adjusts the shadows using values from 0 to 255.
- As you move the sliders, the values are automatically entered in the Output Levels boxes.

Using Auto Levels

You can use Auto Levels to have Fireworks make tonal range adjustments for you.

To adjust highlights, midtones, and shadows automatically:

- 1 Select the image.
- 2 Do one of the following to choose Auto Levels:
 - In the Property inspector, click the Add Effects button, and then choose Adjust Color > Auto Levels from the Add Effects pop-up menu.
 - Choose Filters > Adjust Color > Auto Levels.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

Tip: You can also adjust highlights, midtones, and shadows automatically by clicking the Auto button in the Levels or Curves dialog box.

Using Curves

The Curves feature is similar to the Levels feature but it provides more precise control over the tonal range. Whereas Levels uses highlights, shadows, and midtones to correct the tonal range, Curves lets you adjust any color along the tonal range, instead of only three variables, without affecting other colors. For example, you can use Curves to correct for a color cast caused by lighting conditions.

The grid in the Curves dialog box illustrates two brightness values:

The horizontal axis represents the original brightness of the pixels, shown in the Input box.

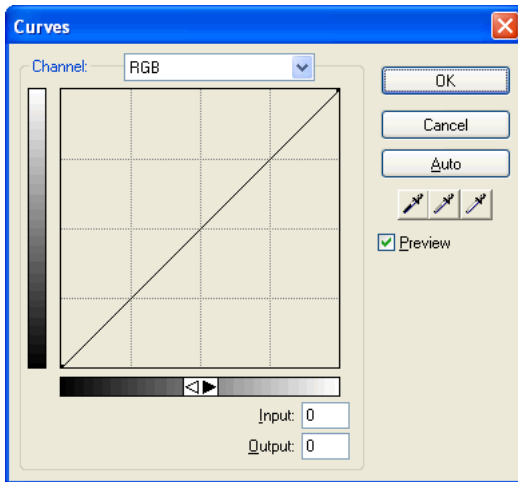
The vertical axis represents the new brightness values, shown in the Output box.

When you first open the Curves dialog box, the diagonal line indicates that no changes have been made, so the input and output values are the same for all pixels.

To adjust a specific point in the tonal range:

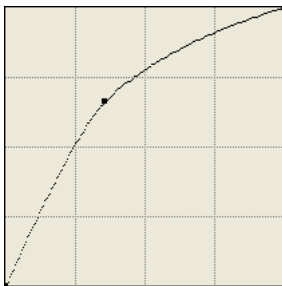
- 1 Select the image.
- 2 Do one of the following to open the Curves dialog box:
 - In the Property inspector, click the Add Effects button, and then choose Adjust Color > Curves from the Add Effects pop-up menu.
 - Choose Filters > Adjust Color > Curves.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).



Curves dialog box

- 3 In the Channel pop-up menu, choose whether you want to apply changes to individual color channels or to all colors.
- 4 Click a point on the grid's diagonal line and drag it to a new position to adjust the curve.
 - Each point on the curve has its own Input and Output values. When you drag a point, the Input and Output values update automatically.
 - The curve displays brightness values of 0 to 255, with 0 representing the shadows.



Curve after dragging a point to adjust

Tip: You can also adjust highlights, midtones, and shadows automatically by clicking the Auto button in the Curves dialog box.

To delete a point along the curve:

- Drag the point off the grid.

Note: You cannot delete the end points of the curve.

Using tonal eyedroppers

You can adjust the highlights, shadows, and midtones using the Shadow, Highlight, or Midtone eyedropper in the Levels or Curves dialog box.

To adjust the tonal balance manually using the tonal eyedroppers:

- 1 Open the Levels or Curves dialog box, and choose a color channel from the Channel pop-up menu.

- 2 Choose the appropriate eyedropper to reset the tonal values in the image:



- Click the lightest pixel in the image with the Highlight eyedropper to reset the highlight value.



- Click a pixel of neutral color in the image with the Midtone eyedropper to reset the midtone value.



- Click the darkest pixel in the image with the Shadow eyedropper to reset the shadow value.

- 3 Click OK.

Adjusting brightness and contrast

The Brightness/Contrast feature modifies the contrast or brightness of pixels in an image. This affects the highlights, shadows, and midtones of an image. You typically use Brightness/Contrast when correcting images that are too dark or too light.



Original; after adjusting brightness

To adjust the brightness or contrast:

- 1 Select the image.
- 2 Do one of the following to open the Brightness/Contrast dialog box:
 - In the Property inspector, click the Add Effects button, and then choose Adjust Color > Brightness/Contrast from the Add Effects pop-up menu.
 - Choose Filters > Adjust Color > Brightness/Contrast.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

- 3 Drag the Brightness and Contrast sliders to adjust the settings.
Values range from –100 to 100.
- 4 Click OK.

Applying the Color Fill Live Effect

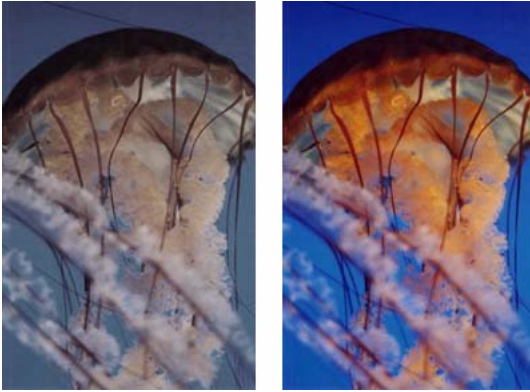
You can use the Color Fill Live Effect to change the color of objects quickly, either by replacing the pixels entirely with a given color or by blending a color into an existing object. When you blend colors, the color is added on top of the object. Blending a color into an existing object is much like using Hue/Saturation; however, blending lets you apply a specific color from a color swatch panel quickly.

To add a Color Fill effect to a selected object:

- 1 In the Property inspector, click the Add Effects button, and then choose Adjust Color > Color Fill from the Add Effects pop-up menu.
- 2 Choose a blending mode.
The default mode is Normal. For information about each blending mode, see [“About blending modes” on page 152](#).
- 3 Choose a fill color from the color box pop-up menu.
- 4 Choose a percentage of opacity for the fill color and press Enter.

Adjusting hue and saturation

You can use the Hue/Saturation feature to adjust the shade of a color, its hue; the intensity of a color, its saturation; or the lightness of a color in an image.



Original; after adjusting the saturation

To adjust the hue or saturation:

- 1 Select the image.
- 2 Do one of the following to open the Hue/Saturation dialog box:
 - In the Property inspector, click the Add Effects button, and then choose Adjust Color > Hue/Saturation from the Add Effects pop-up menu.
 - Choose Filters > Adjust Color > Hue/Saturation.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

- 3 Drag the Hue slider to adjust the color of the image.
Values range from –180 to 180.
- 4 Drag the Saturation slider to adjust the purity of the colors.
Values range from –100 to 100.
- 5 Drag the Lightness slider to adjust the lightness of the colors.
Values range from –100 to 100.
- 6 Click OK.

To change an RGB image to a two-tone image or to add color to a grayscale image:

- Choose Colorize in the Hue/Saturation dialog box.

Note: When you choose Colorize, the value range of the Hue and Saturation sliders changes. Hue changes to 0 to 360. Saturation changes to 0 to 100.

Inverting an image's color values

You can use Invert to change each color in an image to its inverse on the color wheel. For example, applying the filter to a red object (R=255, G=0, B=0) changes the color to light blue (R=0, G=255, B=255).



A monochrome image; after inverting



A color image; after inverting

To invert colors:

- 1 Select the image.
- 2 Do one of the following:
 - In the Property inspector, click the Add Effects button, and then choose Adjust Color > Invert from the Add Effects pop-up menu.
 - Choose Filters > Adjust Color > Invert.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

Blurring and sharpening bitmaps

Fireworks has a set of blurring and sharpening options that you can apply as Live Effects or as irreversible, permanent filters.

Blurring an image

Blurring softens the look of a bitmap image. Fireworks has six blurring options:

Blur softens the focus of selected pixels.

Blur More blurs about three times as much as Blur.

Gaussian Blur applies a weighted average of blur to each pixel to produce a hazy effect.

Motion Blur creates the appearance that the image is moving.

Radial Blur creates the appearance that the image is spinning.

Zoom Blur creates the appearance that the image is moving toward or away from the viewer.

Note: Applying filters from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove a filter, apply it as a Live Effect, as described in the first bulleted option in each of the following procedures. For more information, see [“Using Live Effects” on page 119](#).

To blur an image:

- 1 Select the image.
- 2 Do one of the following:
 - In the Property inspector, click the Add Effects button, and then choose Blur > Blur or Blur More from the Add Effects pop-up menu.
 - Choose Filters > Blur > Blur or Blur More.

To blur an image using Gaussian Blur:

- 1 Select the image.
- 2 Do one of the following to open the Gaussian Blur dialog box:
 - In the Property inspector, click the Add Effects button, and then choose Blur > Gaussian Blur from the Add Effects pop-up menu.
 - Choose Filters > Blur > Gaussian Blur.
- 3 Drag the Blur Radius slider to set the strength of the blur effect.
Values range from 0.1 to 250. An increase in radius results in a stronger blur effect.
- 4 Click OK.

To blur an image using Motion Blur:

- 1 Select the image.
- 2 Do one of the following to open the Motion Blur dialog box:
 - In the Property inspector, click the Add Effects button, and choose Blur > Motion Blur from the Add Effects pop-up menu.
 - Choose Filters > Blur > Motion Blur.
- 3 Drag the Angle dial to set the direction of the blur effect.
- 4 Drag the Distance slider to set the strength of the blur effect.
Values range from 1 to 100. An increase in distance results in a stronger blur effect.
- 5 Click OK.

To blur an image using Radial Blur:

- 1 Select the image.
- 2 Do one of the following to open the Radial Blur dialog box:
 - In the Property inspector, click the Add Effects button, and choose Blur > Radial Blur from the Add Effects pop-up menu.
 - Choose Filters > Blur > Radial Blur.
- 3 Drag the Amount slider to set the strength of the blur effect.
Values range from 1 to 100. An increase in amount results in a stronger blur effect.
- 4 Drag the Quality slider to set the smoothness of the blur effect.
Values range from 1 to 100. An increase in quality results in a blur effect with fewer repetitions of the original image.
- 5 Click OK.

To blur an image using Zoom Blur:

- 1 Select the image.
- 2 Do one of the following to open the Zoom Blur dialog box:
 - In the Property inspector, click the Add Effects button, and choose Blur > Zoom Blur from the Add Effects pop-up menu.
 - Choose Filters > Blur > Zoom Blur.
- 3 Drag the Amount slider to set the strength of the blur effect.
Values range from 1 to 100. An increase in amount results in a stronger blur effect.
- 4 Drag the Quality slider to set the smoothness of the blur effect.
Values range from 1 to 100. An increase in quality results in a blur effect with fewer repetitions of the original image.
- 5 Click OK.

Using the Find Edges effect to create a sketch look

The Find Edges effect changes your bitmaps to look like line drawings by identifying the color transitions in the images and changing them to lines.



Original; after applying Find Edges

To apply the Find Edges effect to a selected area, do one of the following:

- In the Property inspector, click the Add Effects button, and then choose Other > Find Edges from the Add Effects pop-up menu.
- Choose Filters > Other > Find Edges.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

Converting an image to a transparency

You can use the Convert to Alpha effect to convert an object or text into a transparency based upon the transparency of the image.

To apply the Convert to Alpha effect to a selected area, do one of the following:

- In the Property inspector, click the Add Effects button, and then choose Other > Convert to Alpha from the Add Effects pop-up menu.
- Choose Filters > Other > Convert to Alpha.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

Using the Sharpen feature to sharpen an image

You can use the Sharpen feature to correct images that are blurry. Fireworks has three Sharpen options:

Sharpen adjusts the focus of a blurred image by increasing the contrast of adjacent pixels.

Sharpen More increases the contrast of adjacent pixels about three times as much as Sharpen.

Unsharp Mask sharpens an image by adjusting the contrast of the pixel edges. This option offers the most control, so it is usually the best option for sharpening an image.



Original; after sharpening

To sharpen an image using a sharpen option:

- 1 Select the image.
- 2 Do one of the following to choose a sharpen option:
 - In the Property inspector, click the Add Effects button, and then choose Sharpen > Sharpen or Sharpen More from the Add Effects pop-up menu.
 - Choose Filters > Sharpen > Sharpen or Sharpen More.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

To sharpen an image using Unsharp Mask:

- 1 Select the image.
- 2 Do one of the following to open the Unsharp Mask dialog box:
 - In the Property inspector, click the Add Effects button, and then choose Sharpen > Unsharp Mask from the Add Effects pop-up menu.
 - Choose Filters > Sharpen > Unsharp Mask.
- 3 Drag the Sharpen Amount slider to select the amount of sharpening effect from 1% to 500%.
- 4 Drag the Pixel Radius slider to select a radius from 0.1 to 250.

An increase in radius results in a greater area of sharp contrast surrounding each pixel edge.

- 5 Drag the Threshold slider to select a threshold of 0 to 255.

Values between 2 and 25 are most commonly used. An increase in threshold sharpens only those pixels of a higher contrast in the image. A decrease in threshold includes pixels of lower contrast. A threshold of 0 sharpens all pixels in the image.

- 6 Click OK.

Adding noise to an image

When viewed at high magnification levels, most images obtained from digital cameras and scanners do not have perfectly uniform colors. Instead, the colors you see consist of pixels of many different colors. In image editing, “noise” refers to these random color variations in the pixels that make up an image.

Sometimes, such as when you are pasting part of one image into another, the difference in the amount of random color variation in the two images can stand out, preventing the images from blending together smoothly. In such a case, you can add noise to one or both images to create the illusion that both images come from the same source. You can also add noise to an image for artistic reasons, for instance, to simulate an old photograph or static on a television screen.



Original photograph; after adding noise

To add noise to an image:

- 1 Select the image.
- 2 Do one of the following to open the Add Noise dialog box:
 - In the Property inspector, click the Add Effects button, and choose Noise > Add Noise from the Add Effects pop-up menu.
 - Choose Filters > Noise > Add Noise.

Note: Applying a filter from the Filters menu is destructive; that is, it cannot be undone except when Edit > Undo is an option. To maintain the ability to adjust, turn off, or remove this filter, apply it as a Live Effect, as described in the first bulleted option in this step. For more information, see [“Using Live Effects” on page 119](#).

- 3 Drag the Amount slider to set the amount of noise.
Values range from 1 to 400. An increase in amount results in an image with more randomly placed pixels.
- 4 Select the Color check box to apply color noise. Leave the check box unchecked to apply monochrome noise only.
- 5 Click OK.

CHAPTER 3

Working with Vector Objects

A vector object is a computer graphic whose shape is defined by a path. The shape of a vector path is determined by points that are plotted along the path. A vector object's stroke color follows the path. Its fill occupies the area inside the path. The stroke and fill typically determine how the graphic looks when published in print or on the web.

Macromedia Fireworks MX 2004 has many tools for drawing and editing vector objects using a variety of techniques. With the basic shape tools, you can quickly draw straight lines, circles and ellipses, squares and rectangles, stars, and any equilateral polygon with 3 to 360 sides.

You can draw freeform vector paths with the Vector Path and Pen tools. Using the Pen tool, you can draw complex shapes with smooth curves and straight lines by plotting points one by one.

Fireworks offers several methods for editing the vector objects you have drawn. You can change an object's shape by moving, adding, or deleting points. You can use point handles to change the shape of adjacent path segments. Freeform tools let you alter the shape of objects by editing paths directly. You can also edit Auto Shapes using their predefined editing methods.

Commands on the Modify menu give you more options for editing objects, including combining objects to create a single object, creating an object from the intersection of several objects, and expanding the stroke of an object. You can also import graphics and manipulate them using these commands.

Drawing vector objects

Fireworks has many tools for drawing vector objects. With these you can draw basic shapes, freeform paths, and complex shapes by plotting points one by one. You can also draw Auto Shapes, which are vector object groups that have special controls for adjusting their attributes.

Drawing basic lines, rectangles, and ellipses

You can use the Line, Rectangle, or Ellipse tool to draw basic shapes quickly. The Rectangle tool draws rectangles as grouped objects. To move a rectangle corner point independently, you must ungroup the rectangle or use the Subselection tool. To draw a basic rectangle with beveled, chamfered, or rounded corners, see the following procedure. To draw a Auto Shape rectangle with rounded corners, see [“Adjusting beveled, chamfered, and rounded rectangle Auto Shapes” on page 59](#).

To draw a line, rectangle, or ellipse:

- 1 Choose the Line, Rectangle, or Ellipse tool.
- 2 If desired, set the stroke and fill attributes in the Property inspector. See [Chapter 5, “Applying Color, Strokes, and Fills,” on page 97](#).
- 3 Drag on the canvas to draw the shape.
For the Line tool, Shift-drag to constrain lines to 45° increments.
For the Rectangle or Ellipse tool, Shift-drag to constrain shapes to squares or circles.

To draw a line, rectangle, or ellipse from a specific center point:

- Position the pointer at the intended center point and Alt-drag (Windows) or Option-drag (Macintosh) the drawing tool.

To constrain a shape and draw from the center point:

- Position the pointer at the intended center point and Shift-Alt-drag (Windows) or Shift-Option-drag (Macintosh) the drawing tool.

To adjust the position of a basic shape as you draw it:

- While holding down the mouse button, press and hold the Spacebar, then drag the object to another location on the canvas. Release the Spacebar to continue drawing the object.

Note: An exception is the Line tool. Pressing the Spacebar while using the Line tool does not change a line's position on the canvas.

To resize a selected line, rectangle, or ellipse, do one of the following:

- Enter new width (W) or height (H) values in the Property inspector or the Info panel.
- Choose the Scale tool in the Select section of the Tools panel and drag a corner transform handle. This resizes the object proportionally.

Note: You can also resize an object proportionally by choosing **Modify > Transform > Scale** and dragging a corner transform handle, or by choosing **Modify > Transform > Numeric Transform** and entering new dimensions. For more information on resizing and scaling objects, see [“Transforming and distorting selected objects and selections” on page 21](#).

- Drag a corner point on a rectangle.

Note: Note: Scaling a vector object does not change its stroke width.

Drawing basic rounded rectangles

You can draw rectangles with rounded corners by using the Rounded Rectangle tool, or by using the Roundness option in the Property inspector to adjust the roundness of the corners of a selected rectangle. The Rounded Rectangle tool draws rectangles as grouped objects. To move rounded rectangle points independently, you must ungroup the rectangle or use the Subselection tool.

To draw a rectangle with rounded corners:

- 1 Choose the Rounded Rectangle tool, located in the Rectangle tool pop-up menu.
- 2 Drag the canvas to draw the rectangle.

Tip: You can adjust the roundness of the corners as you draw by pressing any of the arrow keys or the 1 or 2 number keys repeatedly.

To round the corners of a selected rectangle:

- Enter a value from 0 to 100 in the Roundness box in the Property inspector and press Enter, or drag the pop-up slider.

Note: If the Property inspector is at half height, click the expander arrow in the lower right corner to expand it to full height.

Drawing basic polygons and stars

With the Polygon tool, you can draw any equilateral polygon or star, from a triangle to a polygon or star with 360 sides.

To draw a polygon:

- 1 Choose the Polygon tool, which is one of the basic shape drawing tools in the Vector section of the Tools panel.
- 2 In the Property inspector, do one of the following to specify the number of sides for the polygon:
 - Use the Sides pop-up slider to choose 3 to 25 sides.
 - Enter a number from 3 to 360 in the Sides text box.
- 3 Drag to draw the polygon.

To constrain a polygon's orientation to increments of 45°, hold down Shift as you draw. The Polygon tool always draws from a center point.

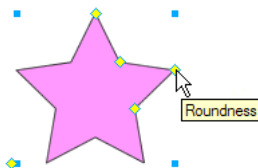
To draw a star:

- 1 Choose the Polygon tool.
- 2 In the Property inspector, choose Star from the Shape pop-up menu.
- 3 In the Sides text box, enter the number of points for the star.
- 4 Choose Automatic or enter a value in the Angle text box. Values closer to 0 result in long, thin points; values closer to 100 result in short, stubby points.
- 5 Drag the canvas to draw the star.

To constrain a star's orientation to increments of 45°, hold down Shift as you drag. The Polygon tool always draws from a center point.

Drawing Auto Shapes

Auto Shapes are intelligent vector object groups that adhere to specialized rules to simplify the creation and editing of common visual elements. Auto Shape tools draw object groups. Unlike other object groups, selected Auto Shapes have diamond-shaped control points in addition to the object group handles. Each control point is associated with a particular visual property of the shape. Dragging a control point alters only the associated visual property. Most Auto Shape control points have tooltips that describe how they affect the Auto Shape. Move the pointer over a control point to see a tooltip that describes the property governed by that control point.



Auto Shape tools create shapes in preset orientations. For example, the Arrow tool draws arrows horizontally. You can transform Auto Shapes to change their orientation. For more information, see [“Transforming and distorting selected objects and selections” on page 21](#).

Although each Auto Shape tool in the Tools panel uses the same easy drawing method, the editable attributes for each Auto Shape are different.

Arrow draws object groups that appear as simple arrows of any proportions. Using control points, you can adjust the arrowhead flare, the tail length and width, and the tip length.

Bent Arrow draws object groups that appear as right-angled arrows of any proportions. Using control points, you can adjust the arrowhead flare, the tail length and width, and the tip length.

Beveled Rectangle draws object groups that appear as rectangles with beveled corners. Using control points, you can edit the amount of bevel for all corners together, or change the bevel of individual corners.

Chamfer Rectangle draws object groups that appear as rectangles with chamfers, corners that are rounded to the inside of the rectangle. You can edit the chamfer radius of all corners together, or change the chamfer radius of individual corners.

Connector Line draws object groups that appear as three-segment connector lines, such as those used to connect the elements of a flowchart or organizational chart. Using control points, you can edit the end points for the first and third sections of the connector line, as well as the location of the second section, which connects the first and last sections.

Doughnut draws object groups that appear as filled rings. Using control points, you can adjust the inner perimeter or split the shape into pieces.

L-Shape draws object groups that appear as right-angled corner shapes. Using control points, you can edit the length and width of the horizontal and vertical sections, as well as the curvature of the corner.

Pie draws object groups that appear as pie charts. Using control points, you can split the shape into pieces.

Smart Polygon draws object groups that appear as equilateral polygons with 3 to 25 sides. Using control points, you can resize and rotate, add or remove segments, increase or decrease the number of sides, or add an inner polygon to the shape.

Rounded Rectangle draws object groups that appear as rectangles with rounded corners. Using control points, you can edit the roundness of all corners together, or change the roundness of individual corners.

Spiral draws object groups that appear as open spirals. Using control points, you can edit the number of spiral rotations, and you can determine whether the spiral is open or closed.

Star draws object groups that appear as stars with any number of points from 3 to 25. Using control points, you can add or remove points, and adjust the inner and outer angles of the points.

To draw a Auto Shape using the Tools panel:

- 1 Choose a Auto Shape tool from its pop-up menu in the Vector section of the Tools panel.
- 2 Do one of the following:
 - Drag the canvas to draw the shape.
 - Click on the canvas to place the shape at its default size.

Adjusting arrow Auto Shapes

Arrows have five control points. There are control points for adjusting the flare of the arrowhead, the length of the arrow tail, the length of the arrowhead tip, and the width of the arrow tail.

To adjust the flare of an arrowhead:

- Drag the flare control point of a selected arrow.

To increase or decrease the sharpness of an arrowhead:

- Drag the tip control point of a selected arrow.

To lengthen or shorten an arrow tail:

- Drag the body length control point of a selected arrow.

To adjust the width of an arrow tail:

- Drag the body width control point of a selected arrow.

Adjusting bent arrow Auto Shapes

Bent arrows have five control points. There are control points for adjusting the flare of the arrowhead, the length of the arrowhead tip, the length of the arrow tail, the width of the arrow tail, and the roundness of the arrow's bend.

To adjust the flare of the arrowhead of a bent arrow:

- Drag the arrowhead control point of a selected bent arrow.

To increase or decrease the sharpness of the arrowhead of a bent arrow:

- Drag the tip control point of a selected bent arrow.

To lengthen or shorten a bent arrow tail:

- Drag the handle length control point of a selected bent arrow.

To adjust the width of a bent arrow tail:

- Drag the handle width control point of a selected bent arrow.

To adjust the corner roundness of a bent arrow tail:

- Drag the corner radius control point of a selected arrow.

Adjusting beveled, chamfered, and rounded rectangle Auto Shapes

Beveled, chamfered, and rounded rectangles have five control points. The control point on each corner adjusts all corners together. You can also Alt-drag (Windows) or Option-drag (Macintosh) to edit a single corner. The remaining control point resizes the rectangle without changing the roundness of the corner.

Note: To edit the corner radius of rectangles drawn with the Rectangle tool, use the Rectangle Roundness setting in the Property inspector.

To adjust the corners of a beveled, chamfered, or rounded rectangle Auto Shape:

- Drag a corner control point of a selected shape.

To adjust a single corner of a beveled, chamfered, or rounded rectangle Auto Shape:

- Alt-drag (Windows) or Option-drag (Macintosh) a corner control point of a selected shape.

To resize a beveled, chamfered, or rounded rectangle Auto Shape without affecting the corners:

- Drag the drag-to-resize control point.

To convert the corners of a rectangle to a different type:

- Alt-click (Windows) or Option-click (Macintosh) any corner control point.

To convert a single corner to a different type:

- Shift-Alt-click (Windows) or Shift-Option-click (Macintosh) any corner control point.

Adjusting connector line Auto Shapes

Connector lines have five control points. There are control points for placing the start and end points, for adjusting the position of the cross bar (the line that connects the start and end line segments), and for adjusting the roundness of the corners.

To move the start or end point of a connector line:

- Drag the control point at the start or end of the connector line.

To reposition the cross bar of a connector line:

- Drag the horizontal position control point.

To adjust all corners of a selected connector line:

- Drag a corner control point.

To adjust a single corner of a selected connector line:

- Alt-drag (Windows) or Option-drag (Macintosh) a corner control point.

Adjusting doughnut Auto Shapes

Doughnut Auto Shapes initially have three control points. There are control points for adjusting the inner perimeter, for setting the inner perimeter to zero, and for dividing the shape into slices to resemble a pie chart. You can add as many sections as you want using control points. For each new section, Fireworks adds a control point for resizing or splitting the new section.

To add sections to a selected doughnut:

- Alt-drag (Windows) or Option-drag (Macintosh) an add/divide sector control point on the outer perimeter of the shape.

To remove a section from a selected doughnut:

- Drag the add/divide sector control point on the outer perimeter of the shape to define the portion of the shape that you want to remain on the canvas.

To resize the inner radius of a selected doughnut:

- Drag the inner radius control point.

To set the inner radius of a selected doughnut to zero:

- Click the reset radius control point.

Adjusting pie Auto Shapes

Pie Auto Shapes initially have three control points. There are control points for dividing the shape into slices, adjusting slice size, and for resetting the pie to one slice. You can add as many sections as you want using control points. For each new section, Fireworks adds a control point for resizing or splitting the new section.

To add sections to a selected pie:

- Alt-drag (Windows) or Option-drag (Macintosh) a drag-to-segment control point on the outer perimeter of the shape.

To resize a slice of a selected pie:

- Drag a drag-to-segment control point on the outer perimeter of the shape.

To reset the a selected pie to one slice:

- Click the Reset control point.

Adjusting L-shaped Auto Shapes

L-shapes have four control points. There are control points for adjusting the length and width of each section of the L-shape, and for adjusting the roundness of the L-shape's bend.

To change the length or width of a selected L-shape's section:

- Drag one of the two length/width control points.

To adjust the roundness of the corners of a selected L-shape:

- Drag the corner radius control point.

Adjusting smart polygon Auto Shapes

Smart Polygons initially appear as pentagons with four control points. There are control points for resizing and rotating, adding or removing polygon segments, increasing or decreasing the number of polygon sides, and adding an inner polygon to the shape to create a ring.

To resize or rotate a selected smart polygon, do one of the following:

- Drag the scale/rotate control point.
- Alt-drag (Windows) or Option-drag (Macintosh) the scale/rotate control point to rotate only.

To add or remove sections from a selected smart polygon:

- Drag the sections control point.

To change the number of sides on a selected smart polygon:

- Drag the sides control point.

To split a selected smart polygon into segments.

- Alt-drag (Windows) or Option-drag (Macintosh) the sides control point.

To resize the inner polygon of a smart polygon, do one of the following:

- If the polygon has an inner polygon, drag the inner polygon control point.
- If the polygon has no inner polygon, drag the reset inner polygon control point.

To reset the inner polygon of a selected smart polygon:

- Click the reset inner polygon control point.

Adjusting spiral Auto Shapes

Spirals have two control points. There are control points for adjusting the number of turns in the spiral, and for making the spiral open or closed.

To adjust the number of turns in a selected spiral:

- Drag the spirals control point.

To open or close a selected spiral:

- Click the open/close spiral control point.

Adjusting star Auto Shapes

Stars initially have five control points. There are control points for adding or removing points, for adjusting the inner and outer angles of the points, and for adjusting the roundness of the peaks and valleys.

To change the number of sides on a selected star:

- Drag the Points control point.

To adjust the valleys of a selected star:

- Drag the valley control point.

To adjust the points of a selected star:

- Drag the peak control point.

To adjust the roundness of a selected star's peaks or valleys:

- Drag a Roundness control point.

Using the Assets panel to add Auto Shapes to a drawing

The Assets panel contains a Shapes tab where you can find additional Auto Shapes. These Auto Shapes are generally more complex than those that appear in the Tools panel. Instead of drawing these Auto Shapes directly on the canvas, you place these Auto Shapes into your drawing by dragging them from the Assets panel to the canvas.

To create a Auto Shape using the Assets panel:

- 1 Choose Window > Auto Shapes to display the Shapes tab, if it is not already visible.
- 2 Drag a Auto Shape preview from the Assets panel to the canvas.
- 3 If desired, edit the Auto Shape by dragging any of its control points.

Adding new Auto Shapes to Fireworks

You can add new Auto Shapes to Fireworks using the Fireworks Exchange website. Some new Auto Shapes will appear in the Shapes tab in the Assets panel, and others will appear in the Tools menu, grouped with the other Auto Shapes.

You can also add new Auto Shapes to Fireworks by writing the JavaScript code for the Auto Shapes yourself. For more information, see *Extending Fireworks*.

To add new Auto Shapes to Fireworks:

- 1 Choose Window > Auto Shapes to display the Shapes tab, if it is not already visible.
- 2 Choose Get More Auto Shapes from the Auto Shapes panel Options menu.
Fireworks connects to the web and navigates to the Fireworks Exchange website.
- 3 Follow the onscreen instructions to select new Auto Shapes and add them to Fireworks.

Drawing freeform paths

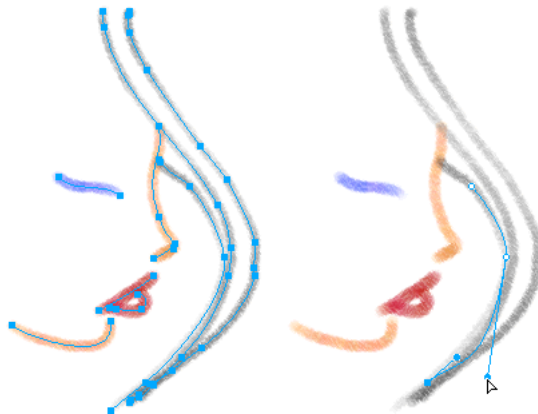
You can draw freeform vector paths with the Vector Path tool, much as you draw using a felt-tip marker or crayon. The Vector Path tool is located in the Pen tool pop-up menu.

You can change the stroke and fill attributes of paths drawn with the Vector Path tool. See [Chapter 5, “Applying Color, Strokes, and Fills,” on page 97](#).

Using the Vector Path tool

The Vector Path tool has a wide variety of brush stroke categories, including Air Brush, Calligraphy, Charcoal, Crayon, and Unnatural. Each category typically has a choice of strokes, such as Light Marker and Dark Marker, Splattered Oil, Bamboo, Ribbon, Confetti, 3D, Toothpaste, and Viscous Alien Paint.

Although the strokes may look like paint or ink, each has the points and paths of a vector object. That means that you can change the shape of the stroke using any of several vector-editing techniques. After you reshape the path, the stroke is redrawn.



A painting edited by moving vector points

You can also modify existing brush strokes and add fills to selected objects you have drawn with the Vector Path tool. The new stroke and fill settings are retained for subsequent use of the Vector Path tool in the current document.

To draw a freeform vector path:



- 1 Choose the Vector Path tool, located in the Pen tool pop-up menu.
- 2 If desired, set stroke and fill attributes in the Property inspector. See [Chapter 5, “Applying Color, Strokes, and Fills,”](#) on page 97.
- 3 Drag to draw. To constrain the path to a horizontal or vertical line, hold down Shift while dragging.
- 4 Release the mouse button to end the path. To close the path, release the mouse button when you return the pointer to the point at the beginning of the path.

Drawing paths by plotting points

One way to draw and edit vector objects in Fireworks is to plot points as if drawing a connect-the-dots picture. When you click each point with the Pen tool, Fireworks automatically draws the path of the vector object from the last point you clicked.

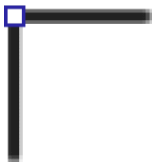
In addition to connecting the points with only straight segments, the Pen tool can draw smooth, mathematically derived curve segments known as Bézier curves. Each point's type—corner point or curve point—determines whether the adjacent curves are straight lines or curves.



You can modify straight and curved path segments by dragging their points. You can further modify curved path segments by dragging their point handles. You can also convert straight path segments to curved (and vice versa) by converting their points.

Drawing straight path segments

Drawing straight line segments with the Pen tool is a simple matter of clicking to place the points. Each click with the Pen tool plots a corner point.



To draw a path with straight line segments:



- 1 Choose the Pen tool.
- 2 If desired, choose Edit > Preferences and enable any of the following options on the Editing tab of the Preferences dialog box, then click OK:

Show Pen Preview previews the line segment that would result from the next click.

Show Solid Points shows solid points while you draw.

Note: On Mac OS X, choose Fireworks > Preferences to open the Preferences dialog box.

- 3 Click on the canvas to place the first corner point.
- 4 Move the pointer and click to place the next point. A straight line segment joins the two points.
- 5 Continue plotting points. Straight segments bridge each gap between points.
- 6 Do one of the following to end the path, either open or closed:
 - Double-click the last point to end the path as an open path.
 - Choose another tool to end the path as an open path.

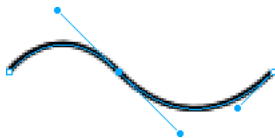
Note: When you choose any selection tool or vector tool other than the Text tool and then return to the Pen tool, Fireworks resumes drawing the object at your next click.

- To close the path, click the first point you plotted. The beginning and end points of a closed path are the same.

Note: Loops formed by a path overlapping itself are not closed paths. Only paths that begin and end on the same point are closed paths.

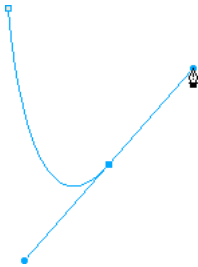
Drawing curved path segments

To draw curved path segments, you click and drag as you plot points. As you draw, the current point shows point handles. Whether drawn with the Pen tool or with another Fireworks drawing tool, all points on all vector objects have point handles. These handles are visible only on curve points, however.



To draw an object with curved segments:

- 1 Choose the Pen tool.
- 2 Click to place the first corner point.
- 3 Move to the location of the next point, then click and drag to produce a curve point. Each time you click and drag, Fireworks extends the line segment to the new point.



- 4 Continue plotting points. If you click and drag a new point, you produce a curve point; if you just click, you produce a corner point.

Tip: You can temporarily switch to the Subselection tool to change the location of points and the shape of curves as you draw. Press Control (Windows) or Command (Macintosh) while dragging a point or point handle with the Pen tool.

- 5 Do one of the following to end the path, either open or closed:
 - Double-click the last point to end the path as an open path.
 - Choose another tool to end the path as an open path. When you choose certain tools and then return to the Pen tool, Fireworks resumes drawing the object at your next click.
 - To close a path, click the first point you plotted. The beginning and end points of a closed path are the same.

Adjusting the shape of a straight path segment

You can lengthen, shorten, or change the position of a straight path segment by moving its points.

To change a straight path segment:

- 1 Select the path with the Pointer or Subselection tool.
- 2 Click a point with the Subselection tool to select it.
Selected corner points appear as solid blue squares.
- 3 Drag the point or use the arrow keys to move the point to a new location.

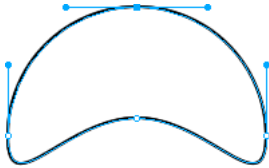
Adjusting the shape of a curved path segment

You can change the shape of a vector object by dragging its point handles with the Subselection tool. The point handles determine the degree of curvature between fixed points. These curves are known as Bézier curves.

To edit the Bézier curve of a path segment:

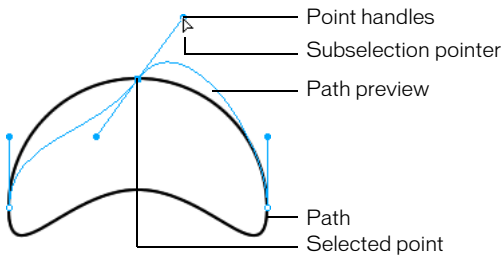
- 1 Select the path with the Pointer or Subselection tool.
- 2 Click a curve point with the Subselection tool to select it.

A selected curve point appears as a solid blue square. The point handles extend from the point.

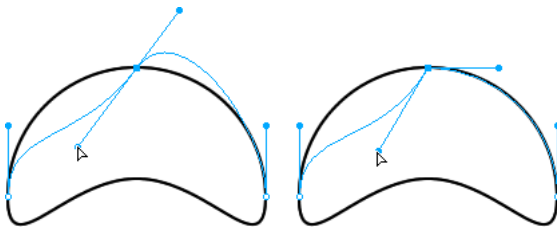


- 3 Drag the handles to a new location. To constrain handle movement to 45° angles, press Shift while dragging.

The blue path preview shows where the new path will be drawn if you release the mouse button.

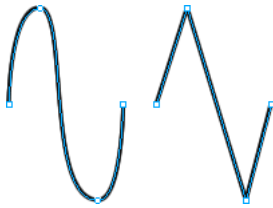


For example, if you drag the left point handle downward, the right point handle goes up. Alt-drag a handle to move it independently

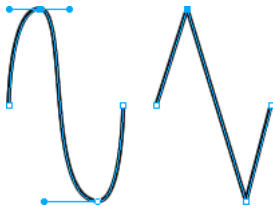


Converting path segments to straight or curved

Straight path segments are intersected by corner points. Curved path segments contain curve points.



You can convert a straight segment to a curved segment and vice versa by converting its point.



To convert a corner point to a curve point:

- 1 Choose the Pen tool.
- 2 Click a corner point on a selected path and drag away from it.

The handles extend, curving the adjacent segments.



Note: To edit the point's handles, choose the Subselection tool or press Control (Windows) or Command (Mac) while the Pen tool is active.

To convert a curve point to a corner point:

- 1 Choose the Pen tool.
- 2 Click a curve point on a selected path.



The handles retract, and the adjacent segments straighten.



Selecting points

The Subselection tool allows you to select multiple points. Before selecting a point with the Subselection tool, you must select the path using the Pointer or Subselection tool or by clicking its thumbnail in the Layers panel.

To select specific points on a selected path:



- 1 Choose the Subselection tool.
- 2 Do one of the following:
 - Click a point, or hold down Shift and click multiple points one by one.



- Drag around the points to be selected.

To display a curve point's handles:

- Click the point with the Subselection tool. If either point nearest the clicked point is a curve point, the near handle is also displayed.

Moving points and point handles

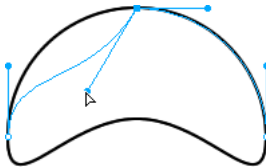
You can change an object's shape by dragging its points and point handles with the Subselection tool.

To move a point:

- Drag it with the Subselection tool.
Fireworks redraws the path to reflect the point's new position.

To change the shape of a path segment:

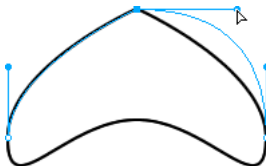
- Drag a point handle with the Subselection tool. Alt-drag (Windows) or Option-drag (Macintosh) to drag one handle at a time.



To adjust the handle of a corner point:



- 1 Choose the Subselection tool.
- 2 Select a corner point.
- 3 Alt-drag (Windows) or Option-drag (Macintosh) the point to display its handle and bend the adjacent segment.



Dragging a corner point handle with the Subselection tool to edit the adjacent path segment

Inserting and deleting points on a path

You can add points to a path and delete points from a path. Adding points to a path gives you control over a specific segment within the path. Deleting points from the path reshapes it or simplifies editing.

To insert a point on a selected path:

- Using the Pen tool, click anywhere on the path where there is not a point.

To delete a point from a selected path segment, do one of the following:

- Click a corner point on a selected object with the Pen tool.
- Double-click a curve point on a selected object with the Pen tool.
- Select a point with the Subselection tool and press Delete or Backspace.

Continuing an existing path

You can use the Pen tool to continue drawing an existing open path.

To resume drawing an existing open path:

- 1 Choose the Pen tool.
- 2 Click the end point and continue the path.

The Pen tool pointer changes to indicate that you are adding to a path.

Merging two open paths

You can connect two open paths to form one continuous path. When you connect two paths, the topmost path's stroke, fill, and effect attributes become the attributes of the newly merged path.

To merge two open paths:

- 1 Choose the Pen tool.
- 2 Click the end point of one of the paths.
- 3 Move the pointer to the end point of the other path and click.

Auto-joining similar open paths

You can easily join one open path with another that has similar stroke and fill characteristics.

To auto-join two open paths:

- 1 Select an open path.
- 2 Choose the Subselection tool and drag an end point of the path within a few pixels of the end point of the similar path.

The end point snaps to the other path, and the two become a single path.

Editing paths

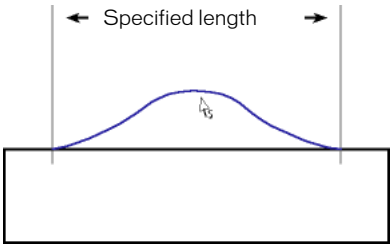
Fireworks offers several methods for editing vector objects. You can change an object's shape by moving, adding, or deleting points, or you can move point handles to change the shape of adjacent path segments. Freeform tools let you alter the shape of objects by editing paths directly. You can also use path operations to create new shapes by combining or altering existing paths.

Editing with vector tools

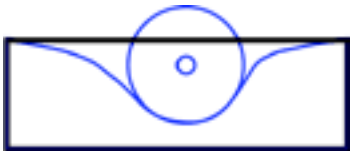
In addition to dragging points and point handles, you can use several Fireworks tools to edit vector objects directly.

Bending and reshaping vector objects

The Freeform tool allows you to bend and reshape vector objects directly instead of manipulating points. You can push or pull any part of a path, regardless of where the points are located. Fireworks automatically adds, moves, or deletes points along the path as you change the vector object's shape.








Freeform tool pulling a path segment



Freeform tool pushing a path segment

As you move the pointer over a selected path, it changes to the push or pull pointer, depending on its location relative to the selected path.

Pointer	Meaning
	The Freeform tool is in use.
	The Freeform tool is in use, and the pull pointer is in position to pull the selected path.
	The Freeform tool is in use, and the pull pointer is pulling the selected path.
	The Freeform tool is in use, and the push pointer is active.
	The Reshape Area tool is in use, and the reshape area pointer is active. The area from the inner circle to the outer circle represents reduced strength.

When the pointer is directly over the path, you can pull the path. When the pointer is not directly over the path, you can push the path. You can change the size of the push or pull pointer.

Note: The Freeform tool also responds to pressure from a Wacom or other compatible tablet.

To pull a selected path:



- 1 Choose the Freeform tool.
- 2 Move the pointer directly over the selected path.



The pointer changes to the pull pointer.

- 3 Drag the path.

To push a selected path:



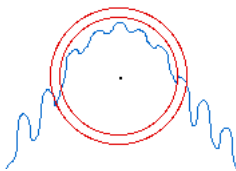
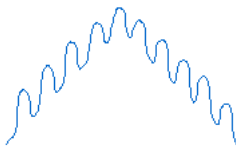
- 1 Choose the Freeform tool.
The pointer changes to the push or pull pointer.
- 2 Point slightly away from the path.
- 3 Drag toward the path to push it. Nudge the selected path to reshape it.

To change the size of the push pointer, do one of the following:

- While holding down the mouse button, press the Right Arrow key or 2 to increase the width of the pointer.
- While holding down the mouse button, press the Left Arrow key or 1 to decrease the width of the pointer.
- To set the size of the pointer and set the length of the path segment that it affects, deselect all objects in the document, and then enter a value from 1 to 500 in the Size text box of the Property inspector. The value indicates the size of the pointer in pixels.

Distorting paths

You can use the Reshape Area tool to pull the area of all selected paths within the outer circle of the reshape area pointer.



The pointer's inner circle is the boundary of the tool at full strength. The area between the inner and outer circle reshapes paths at less than full strength. The pointer's outer circle determines the gravitational pull of the pointer. You can set its strength.

Note: The Reshape Area tool also responds to pressure from a Wacom or other compatible tablet.

To distort selected paths:



- 1 Choose the Reshape Area tool, located in the Freeform tool pop-up menu.
- 2 Drag across the paths to redraw them.

To change the size of the reshape area pointer, do one of the following:

- While holding down the mouse button, press the Right Arrow key or 2 to increase the width of the pointer.
- While holding down the mouse button, press the Left Arrow key or 1 to decrease the width of the pointer.
- To set the size of the pointer and set the length of the path segment that it affects, deselect all objects in the document, and then enter a value from 1 to 500 in the Size text box of the Property inspector. The value indicates the size of the pointer in pixels.

To set the strength of the inner circle of the reshape area pointer:

- Enter a value from 1 to 100 in the Strength text box of the Property inspector. The value indicates the percentage of the pointer's potential strength. The higher the percentage, the greater the strength.

Redrawing paths

You can use the Redraw Path tool to redraw or extend a segment of a selected path while retaining the path's stroke, fill, and effect characteristics.

To redraw or extend a segment of a selected path:



- 1 Choose the Redraw Path tool, located in the Pen tool pop-up menu.
- 2 Move the pointer directly over the path.
The pointer changes to the redraw path pointer.
- 3 Drag to redraw or extend a path segment. The portion of the path to be redrawn is highlighted in red.
- 4 Release the mouse button.

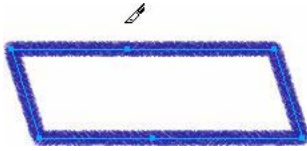
Changing a path's appearance by varying pressure and speed

You can change the appearance of a path using the Path Scrubber tools. Using varying pressure or speed, you can change a path's stroke properties. These properties include stroke size, angle, ink amount, scatter, hue, lightness, and saturation. You can specify which of these properties is affected by the Path Scrubber tools using the Sensitivity tab of the Edit Stroke dialog box. You can also specify how much pressure and speed affects these properties. For details on setting options in the Edit Stroke dialog box, see [“Working with strokes” on page 106](#).

Cutting paths into multiple objects



The Knife tool allows you to slice a path into two or more paths.



To cut a selected path:

- 1 Choose the Knife tool.

Note: Using the eraser on Wacom pens automatically selects the Knife tool.

- 2 Do one of the following:
 - Drag the pointer across the path.
 - Click on the path.
- 3 Deselect the path.

Editing with path operations

You can use path operations in the Modify menu to create new shapes by combining or altering existing paths. For some path operations, the stacking order of selected path objects defines how the operation works. For information on arranging the stacking order of selected objects, see [“Stacking objects” on page 26](#).

Note: Using a path operation removes all pressure and speed information from the affected paths.

Combining path objects

You can combine path objects into a single path object. You can connect the end points of two open paths to create a single closed path, or you can join multiple paths to create a composite path.

To create one continuous path from two open paths:

- 1 Choose the Subselection tool.
- 2 Select two end points on two open paths.
- 3 Choose Modify > Combine Paths > Join.

To create a composite path:

- 1 Select two or more open or closed paths.
- 2 Choose Modify > Combine Paths > Join.

To break apart a composite path:

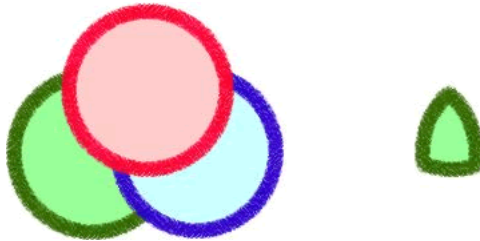
- 1 Select the composite path.
- 2 Choose Modify > Combine Paths > Split.

To combine selected closed paths as one path enclosing the entire area of the original paths:

- Choose **Modify > Combine Paths > Union**. The resulting path assumes the stroke and fill attributes of the object that is placed farthest back.

Creating an object from the intersection of other objects

Using the **Intersect** command, you can create an object from the intersection of two or more objects.

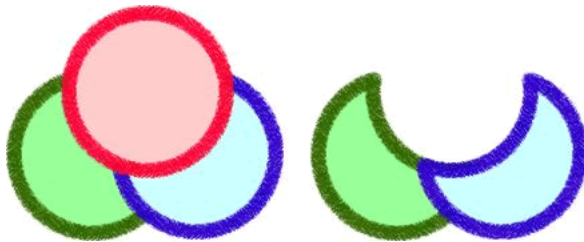


To create a closed path that encloses the area common to all selected closed paths:

- Choose **Modify > Combine Paths > Intersect**. The resulting path assumes the stroke and fill attributes of the object that is placed farthest back.

Removing portions of a path object

You can remove portions of a selected path object as defined by the overlapping portions of another selected path object arranged in front of it.

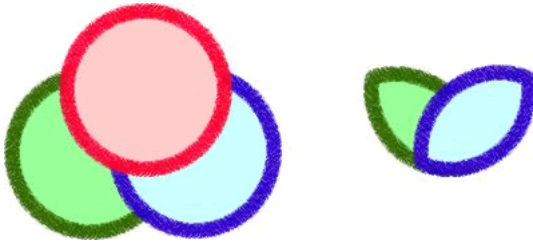


To remove portions of a path object:

- 1 Select the path object that defines the area to be removed.
- 2 Choose **Modify > Arrange > Bring to Front**.
- 3 Hold down **Shift** and add to the selection the path object from which the portions are to be removed.
- 4 Choose **Modify > Combine Paths > Punch**.
Stroke and fill attributes remain unchanged.

Cropping a path

You can crop a path using the shape of another path. The front or topmost path defines the shape of the cropped area.



To crop a selected path:

- 1 Select the path object that defines the area to be cropped.
- 2 Choose Modify > Arrange > Bring to Front.
- 3 Hold down Shift and add to the selection the path object to be cropped.
- 4 Choose Modify > Combine Paths > Crop.

The resulting path object retains the stroke and fill attributes of the object that is placed farthest back.

Simplifying a path

You can remove points from a path while maintaining its overall shape. The Simplify command removes redundant points on your path by an amount you specify.

You might want to use Simplify if you have a straight line that contains more than two points, for example. (Only two points are necessary to produce a straight line.) Or perhaps your path contains points that lie exactly on top of one another. Simplify removes points that are unnecessary to reproduce the path you've drawn.

To simplify a selected path:

- 1 Choose Modify > Alter Path > Simplify.
The Simplify dialog box appears.
- 2 Enter a simplification amount and click OK.

As you increase the amount of simplification, you increase the degree to which Fireworks can alter the path to reduce the number of points on that path.

Expanding a stroke

You can convert the stroke of a selected path into a closed path. The resulting path creates the illusion of a path with no fill and a stroke that takes on the same attributes as the original object's fill.



Note: Expanding the stroke of a path that intersects itself can produce interesting results. If the original path contains a fill, the intersecting portions of the path will not contain a fill after the stroke is expanded.

To expand a selected object's stroke:

- 1 Choose Modify > Alter Path > Expand Stroke to open the Expand Stroke dialog box.
- 2 Set the width of the resulting closed path.
- 3 Specify a corner type: miter, round, or beveled.
- 4 If you chose miter, set the miter limit, the point at which a miter corner automatically becomes a beveled corner. The miter limit is the ratio of miter corner length to stroke width.
- 5 Choose an end cap option: butt, square, or round. Then click OK.

A closed path in the shape of the original and with the same stroke and fill attributes replaces the original path.

Contracting or expanding a path

You can contract or expand the path of a selected object by a specific number of pixels.

To expand or contract a selected path:

- 1 Choose Modify > Alter Path > Inset Path to open the Inset Path dialog box.
- 2 Choose a direction to contract or expand the path:
 - Inside** contracts the path.
 - Outside** expands the path.
- 3 Set the width between the original path and the contracting or expanding path.
- 4 Specify a corner type: miter, round, or beveled.
- 5 If you chose miter, set the miter limit, the point at which a miter corner automatically becomes a beveled corner. The miter limit is the ratio of miter corner length to stroke width.
- 6 Click OK.

A smaller or larger path object with the same stroke and fill attributes replaces the original path object.

CHAPTER 4

Using Text

Macromedia Fireworks MX 2004 has many text features typically reserved for sophisticated desktop publishing applications. You can create text in a variety of fonts and sizes and adjust kerning, spacing, color, leading, baseline shift, and more. Combining Fireworks text-editing features with the wide range of strokes, fills, effects, and styles makes text a lively element of your graphic designs. You can also use the Fireworks spell-checker to correct misspellings.

The capability to edit text anytime—even after you apply Live Effects such as drop shadows and bevels—means you can easily make changes to text. You can also copy objects that include text and change the text for each copy. Vertical text, transformed text, text attached to paths, and text converted to paths and images extend the design possibilities.

You can import text while retaining rich text format attributes. Also, when you import a Photoshop document containing text, the text remains editable. Fireworks handles missing fonts upon import by asking you to choose a substitute font or allowing you to import text as a static image.

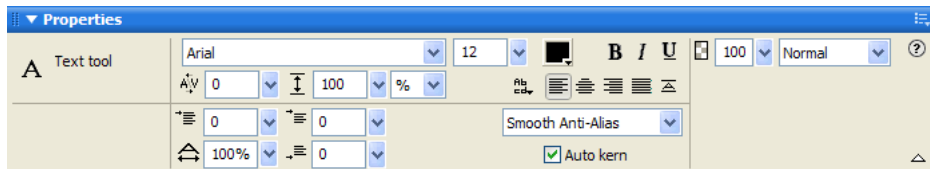
Entering text

You can enter, format, and edit text in your graphics using the Text tool and the options in the Property inspector.



Text tool

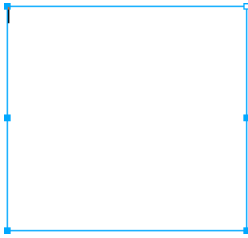
Note: If the Property inspector is minimized, click the expander arrow in the lower right corner to see all text properties.



The Property inspector when the Text tool is selected

Creating text blocks

All text in a Fireworks document appears inside a rectangle with handles called a text block.



To enter text:

- 1 Choose the Text tool.
The Property inspector displays options for the Text tool.
- 2 Choose color, font, size, spacing, and other text characteristics.
- 3 Do one of the following:
 - Click in your document where you want the text block to begin. This creates an auto-sizing text block.
 - Drag to draw a text block. This creates a fixed-width text block.For information on the different types of text blocks, see [“Using auto-sizing and fixed-width text blocks” on page 81](#).
- 4 Type your text. To enter a paragraph break, press Enter.
- 5 If desired, highlight text within the text block after you type it and reformat it.
- 6 When you have finished entering text, do one of the following:
 - Click outside the text block.
 - Choose another tool in the Tools panel.
 - Press Escape.

Moving text blocks

You can select a text block and move it anywhere in your document, as you would any other object. You can also move text blocks as you drag to create them.

To move a text block:

- Drag it to the new location.

To move a text block while you drag to create it:

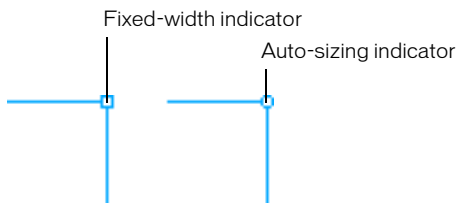
- 1 While holding down the mouse button, press and hold down the Spacebar, then drag the text block to another location on the canvas.
- 2 Release the Spacebar to continue drawing the text block.

Using auto-sizing and fixed-width text blocks

Fireworks has both auto-sizing text blocks and fixed-width text blocks. An auto-sizing text block expands horizontally as you type. If you remove text, the auto-sizing text block shrinks to accommodate only the remaining text. Auto-sizing text blocks are created by default when you click on the canvas with the Text tool and start typing.

Fixed-width text blocks allow you to control the width of wrapped text. Fixed-width text blocks are created by default when you drag to draw a text block using the Text tool.

When the text pointer is active within a text block, a hollow circle or hollow square appears in the upper right corner of the text block. The circle indicates an auto-sizing text block; the square indicates a fixed-width text block. Double-click the corner to change from one kind of text block to the other.



A fixed-width text block and an auto-sizing text block

To change a text block to fixed-width or auto-sizing:

- 1 Double-click inside the text block.
- 2 Double-click the circle or square in the upper right corner of the text block.
The text block changes to the other type.

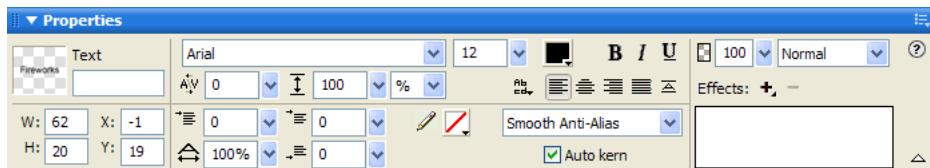
To change a selected text block to fixed-width by resizing it:

- Drag a resize handle.
This automatically changes the text block from auto-sizing to fixed-width.

Editing text

Within a text block, you can vary all aspects of text, including size, font, spacing, leading, and baseline shift. When you edit text, Fireworks redraws its stroke, fill, and effect attributes accordingly.

You can change a text block's attributes using the Property inspector. If the Property inspector is minimized, click the expander arrow in the lower right corner to see all text properties.



Property inspector when a text block is selected

You can also use the Text Editor and the commands in the Text menu to edit text, but the Property inspector offers the quickest way to change text attributes and provides more detailed editing control than the other two options. For more information about the Text Editor, see [“Using the Text Editor” on page 95](#).

Note: Changes you make during a text-editing session constitute only one Undo. Choosing Edit > Undo while editing text will undo every text edit you’ve made from the time you double-clicked the text block to edit its contents.

To edit text:

- 1 Select the text you want to change:
 - Click a text block with the Pointer or Subselection tool to select the entire block. To select multiple blocks simultaneously, hold down Shift as you select each block.
 - Double-click a text block with the Pointer or Subselection tool, and highlight a range of text.
 - Click inside a text block with the Text tool, and highlight a range of text.
- 2 Make your changes.

For information about changing text attributes, see [“Choosing a font, size, and text style” on page 82](#), [“Applying text color” on page 82](#), [“Setting kerning” on page 84](#), [“Setting leading” on page 85](#), [“Setting text orientation” on page 85](#), [“Setting text alignment” on page 86](#), and [“Indenting text” on page 87](#).
- 3 Do one of the following to apply your changes:
 - Click outside the text block.
 - Choose another tool in the Tools panel.
 - Press Escape.

Choosing a font, size, and text style

You use the Property inspector to change the font, size, and style attributes of the text in a text block.

To change the font, size, and style of selected text using the Property inspector:

- 1 To change the font, choose a font from the Font pop-up menu.



- 2 To change the font size, drag the Font Size pop-up slider or enter a value in the text box. Font size is measured in points.
- 3 To apply a bold, italic, or underline style, click the corresponding style button.

Applying text color

Text color is controlled by the Fill Color box. By default, text is black and has no stroke. You can change the color of all text in a selected text block or of highlighted text in a text block. The Text tool retains the current text color from text block to text block.

The Text tool retains the current text color independently of the fill color of other tools. When you use another tool after using the Text tool, the fill and stroke settings revert to the most recent settings from before the Text tool was used. Likewise, when you return to the Text tool, the fill color reverts to the most recent Text tool setting, and the stroke is reset to None. Fireworks retains the current Text tool color as you switch from document to document or close and reopen Fireworks.

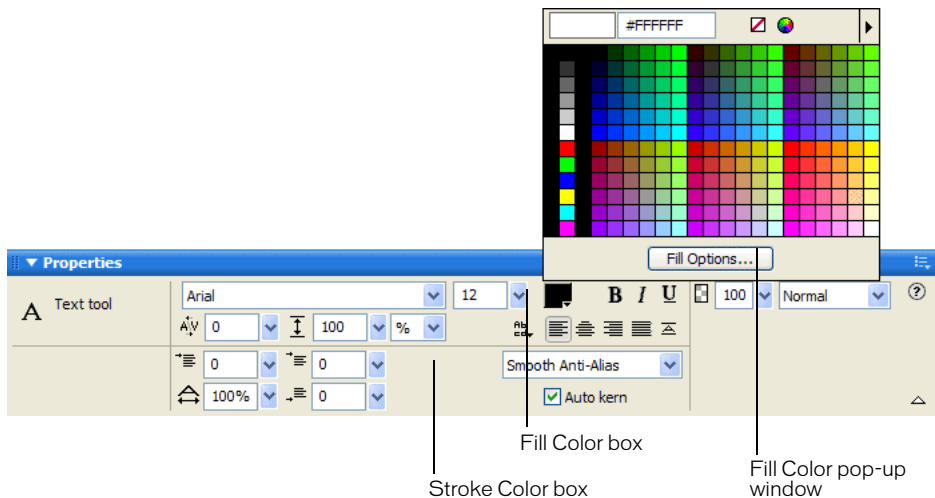
You can add a stroke and Live Effects to all text in a selected text block, but not to highlighted text in a text block. Fireworks updates stroke characteristics and Live Effects applied to a text block as you edit text in the text block, but the Text tool does not retain stroke characteristics or Live Effects if you create a new text block. For more information, see [“Applying strokes, fills, and effects to text” on page 89](#).

Applying color to all text in selected text blocks

You can apply text color to all text in selected text blocks using the Property inspector, any Fill Color box, or the Eyedropper tool. You can also use any of these methods to set the text color for the Text tool.

To set the color of all text in a selected text block, do one of the following:

- Click the Fill Color box in the Property inspector and choose a color from the color pop-up window, or sample a color from anywhere on the screen using the eyedropper pointer while either color pop-up window is open.



Fill Color box in the Property inspector

- Click the Fill Color box in the Tools panel and choose a color from the color pop-up window, or sample a color from anywhere on the screen using the eyedropper pointer while the Fill Color box pop-up window is open.
- Click the icon next to the Fill Color box in the Tools panel, choose the Eyedropper tool, and then click to sample a color anywhere in any open document.

The color of the Fill Color box in the Tools panel changes to reflect the color you sample with either the eyedropper pointer or the Eyedropper tool, and the color of the selected text also changes.

Applying color to highlighted text in a text block

You can change the text color of highlighted text in a text block using the Property inspector or any Fill Color box. You cannot use the Eyedropper tool to edit the color of highlighted text.

Note: If you attempt to apply a stroke or Live Effect to highlighted text in a text block, the entire text block is automatically selected.

To apply text color only to highlighted text in a text block, do one of the following:

- Click the Fill Color box in the Property inspector and choose a color from the color pop-up window, or sample a color from anywhere on the screen using the eyedropper pointer while the Fill Color box pop-up window is open.
- Click the Fill Color box in the Tools panel and choose a color from the color pop-up window, or sample a color from anywhere on the screen using the eyedropper pointer while the Fill Color box pop-up window is open.

Setting kerning

Kerning increases or decreases the spacing between certain pairs of letters to improve their appearance. Most fonts include information that automatically reduces the amount of space between certain letter pairs, such as “TA” or “Va.” Fireworks auto-kerning uses a font’s kerning information when displaying text, but you may want to turn it off at smaller point sizes, or when the text has no anti-aliasing. Kerning is measured as a percentage.

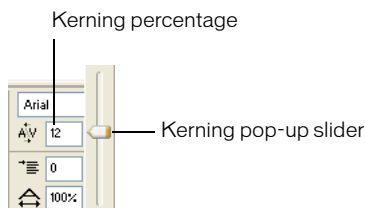
You can use the Property inspector or the keyboard to set kerning.

To disable automatic kerning:

- In the Property inspector, deselect Auto Kern. If the Property inspector is minimized, click the expander arrow in the lower right corner to see all properties.

To set kerning:

- 1 Do one of the following to select the text you want to kern:
 - Click between two characters with the Text tool.
 - Use the Text tool to highlight the characters you want to change.
 - Use the Pointer tool to select an entire text block. Shift-click to select multiple text blocks.
- 2 Do one of the following:
 - In the Property inspector, drag the Kerning pop-up slider or enter a percentage in the text box.



Zero represents normal kerning. Positive values move letters farther apart. Negative values move letters closer together.

- Hold down Control (Windows) or Command (Macintosh) while pressing the Left Arrow or Right Arrow keys on the keyboard.

The Left Arrow key increases the space between letters by 1%, and the Right Arrow key moves letters closer together by 1%.

Tip: Hold down Shift and Control (Windows) or Shift and Command (Macintosh) while pressing the Left Arrow or Right Arrow keys to adjust kerning by 10% increments.

Setting leading

Leading determines the distance between adjacent lines in a paragraph. Leading can be measured in pixels or as a percentage of the distance, in points, separating the lines baseline to baseline.

You can use the Property inspector or the keyboard to set leading.



Leading options in the Property inspector

To set the leading of selected text in the Property inspector:

- 1 In the Property inspector, drag the Leading pop-up slider or enter a value in the text box. The default is 100%.
- 2 To change the leading unit type, choose % or px (pixels) from the Leading Units pop-up menu.

To set the leading of selected text using the keyboard:

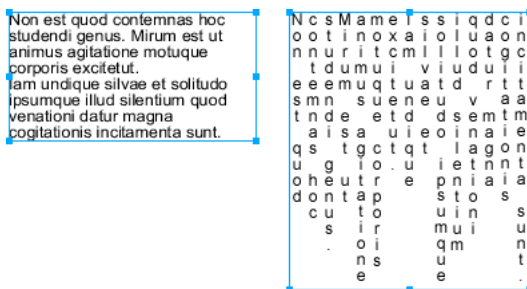
- Hold down Control (Windows) or Command (Macintosh) while pressing the Up Arrow or Down Arrow keys.

The Up Arrow key increases the space between lines, and the Down Arrow key moves lines closer together.

Tip: Hold down Shift and Control (Windows) or Shift and Command (Macintosh) while pressing the Up Arrow or Down Arrow keys to adjust leading by increments of 10.

Setting text orientation

A text block can be oriented horizontally or vertically. By default, text is oriented horizontally.



Horizontal and vertical orientation

Text can also flow right to left or left to right.

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Text flowing right to left and left to right

In Fireworks, you set horizontal and vertical orientation as well as the direction of text flow in the Property inspector. These settings apply to entire text blocks only.

To set the orientation of a selected text block:



- 1 Click the Text Orientation button in the Property inspector.
- 2 Select an orientation option from the pop-up menu:

Horizontal Left to Right is the default setting for text in Fireworks for most languages. It orients text horizontally and displays characters from left to right.

Horizontal Right to Left orients text horizontally and displays characters from right to left. It is useful for displaying text in languages where text flows from right to left, such as Hebrew or Arabic.

Vertical Left to Right orients text vertically. If you apply this to lines of text separated by hard or soft returns, each line of text is displayed as a column. The columns flow from left to right.

Vertical Right to Left orients text vertically. Multiple lines of text separated by returns are displayed as columns that flow from right to left. This option is useful for displaying text in languages such as Japanese in which text flows from right to left in columns.

Note: Vertical text characters always flow from top to bottom. Choosing one of the Vertical orientation options affects only the order of text columns, not the order of text characters.

Setting text alignment

Alignment determines the position of a paragraph of text relative to the edges of its text block. In horizontal alignment, text is aligned relative to the left and right edges of a text block. In vertical alignment, text is aligned relative to the top and bottom edges of a text block. For more information on setting horizontal or vertical text orientation, see [“Setting text orientation” on page 85](#).

You can align horizontal text to the left or right edges of the text block, center it, or fully justify it, so that text aligns to both the left and right edges. By default, horizontal text is left-aligned.

Vertical text can be aligned to the top or bottom of a text block, centered within the text block, or fully justified between both the top and bottom edges.

To achieve a stretched effect, or to fit text into a specific space, you can set the alignment to stretch the text horizontally (for horizontally oriented text) or vertically (for vertically oriented text).

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Horizontal text stretched to fill a text block

The alignment controls appear in the Property inspector when text is highlighted or a text block is selected.



Text alignment options in the Property inspector

To set text alignment:

- 1 Select the text.
- 2 Click an alignment button in the Property inspector.

Indenting text

You can indent the first line of a paragraph using the Property inspector. Indentation is measured in pixels.



Paragraph indent option in the Property inspector

If the Property inspector is minimized, click the expander arrow in the lower right corner to see all properties.

To indent the first line of selected paragraphs:

- In the Property inspector, drag the Paragraph Indent pop-up slider or enter a value in the text box.

Setting paragraph spacing

You can specify the amount of spacing you want before and after paragraphs using the Property inspector. Paragraph spacing is measured in pixels.



Paragraph spacing options in the Property inspector

If the Property inspector is minimized, click the expander arrow in the lower right corner to see all properties.

To set the space that precedes selected paragraphs:

- In the Property inspector, drag the Space Preceding Paragraph pop-up slider or enter a value in the text box.

To set the space after selected paragraphs:

- In the Property inspector, drag the Space After Paragraph pop-up slider or enter a value in the text box.

Smoothing text edges

To smooth out a text edge, you anti-alias it. This makes the edges of the text blend into the background so that the text is cleaner and more readable when it is large.



Original text; after smoothing

You use the Property inspector to set anti-aliasing. If the Property inspector is minimized, click the expander arrow in the lower right corner to see all properties. Anti-aliasing applies to all characters in a given text block.

No Anti-Alias disables text smoothing.

Crisp Anti-Alias creates a sharp transition between the edges of the text and the background.

Strong Anti-Alias creates a very abrupt transition between the edges of the text and the background, preserving the shapes of the text characters and enhancing detailed areas of the characters.

Smooth Anti-Alias creates a soft transition between the edges of the text and the background.

System Anti-Alias uses the text smoothing method provided by Windows XP or Mac OS X.

Custom Anti-Alias provides the following expert-level controls over anti-aliasing:

Oversampling determines the amount of detail used for creating the transition between the text edges and the background.

Sharpness determines the smoothness of the transition between the text edges and the background.

Strength determines how much the text edges blend into the background.

To apply an anti-aliased edge to selected text:

- In the Property inspector, choose one of options from the Anti-Aliasing pop-up menu:

Note: When you open vector files, such as FreeHand files, in Fireworks, text is anti-aliased. You can edit this attribute using the Property inspector. For more information, see Fireworks Help.

Expanding and contracting character width

You can expand or contract the character width of horizontal text using the Horizontal Scale option in the Property inspector.

Horizontal scale is measured in percentage values. 100% is the default.



Horizontal Scale option in the Property inspector

If the Property inspector is minimized, click the expander arrow in the lower right corner to see all properties.

To expand or contract selected characters:

- In the Property inspector, drag the Horizontal Scale pop-up slider or enter a value in the text box. Drag the slider higher than 100% to expand the width or height of the characters, and drag it lower to reduce their width or height.

Setting baseline shift

Baseline shift determines how closely text sits above or below its natural baseline. If there is no baseline shift, the text sits on the baseline. You can use baseline shift to create subscript and superscript characters.

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The baseline shift controls are in the Property inspector. Baseline shift is measured in pixels.



Baseline Shift option in the Property inspector

To set baseline shift for selected text:

- In the Property inspector, drag the Baseline Shift pop-up slider or enter a value in the text box to specify how low or high, respectively, Fireworks should place the subscript or superscript text. Enter positive values to create superscript characters. Enter negative values to create subscript characters.

Applying strokes, fills, and effects to text

You can apply strokes, fills, and effects to text in a selected text block as you would to any other object. You can apply any style in the Styles panel to text, even if it is not a text style. You can also create a new style by saving text attributes.

After you create text, it remains editable in Fireworks. Strokes, fills, effects, and styles are updated automatically as you edit the text.



Text with stroke, fill, effect, and style applied

You can apply solid text color to highlighted text in a text block. However, stroke attributes, Live Effects, and nonsolid fill attributes such as gradient fills are applied to all text in a selected text block, not just to the highlighted text.

For more information about strokes and fills, see [Chapter 5, “Applying Color, Strokes, and Fills,” on page 97](#). For more information about using styles, see [“Using styles” on page 155](#). For information about Live Effects, see [“Applying Live Effects” on page 120](#).

The Text tool does not retain stroke or Live Effect settings when you create a new text block. However, you can save stroke, fill, and Live Effects attributes that you apply to text for reuse as a style in the Styles panel. Saving text attributes as a style saves only the attributes, not the text itself.

To save text attributes as a style:

- 1 Create a text object and apply the attributes you want.
- 2 Select the text object.
- 3 Choose New Style from the Styles panel Options menu.
- 4 Choose the properties for the new style and name it.
- 5 Click OK.

Attaching text to a path

To free text from the restrictions of rectangular text blocks, you can draw a path and attach text to it. The text flows along the shape of the path and remains editable.

A path to which you attach text temporarily loses its stroke, fill, and effect attributes. Any stroke, fill, and effect attributes you apply subsequently are applied to the text, not the path. If you then detach the text from the path, the path regains its stroke, fill, and effect attributes.

Note: Attaching text that contains hard or soft returns to a path can produce unexpected results.

If text attached to an open path exceeds the length of the path, the remaining text returns and repeats the shape of the path.

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Text on a path that returns and repeats the path shape

To place text on a path:

- 1 Shift-select a text block and a path.
- 2 Choose Text > Attach to Path.

To detach text from a selected path:

- Choose Text > Detach from Path.

Editing paths and text attached to paths

Text that you have attached to a path remains editable. In addition, you can edit the shape of the path.

To edit text attached to a path, do one of the following:

- Double-click the text-on-a-path object with the Pointer or the Subselection tool.
- Choose the Text tool and select the text to edit.

To edit the shape of the path:

- 1 Choose Text > Detach from Path.
- 2 Edit the path.
- 3 Place the text back on the path.

Changing text orientation and direction on a path

The order in which you draw a path establishes the direction of the text attached to it. For example, if you draw a path from right to left, the attached text appears backward and upside down.



Text attached to a path drawn right to left

You can change the orientation or reverse the direction of the text attached to a path. You can also change the starting point of text on a path.

To change the orientation of text on a selected path:

- Choose Text > Orientation and select an orientation.



Text rotated around a path



Text oriented vertically on a path



Text skewed vertically around a path



Text skewed horizontally around a path

To reverse the direction of text on a selected path:

- Choose Text > Reverse Direction.

To move the starting point of text attached to a path:

- 1 Select the text-on-a-path object.
- 2 In the Property inspector, enter a value in the Text Offset text box. Then press Enter.

Note: If the Property inspector is minimized, click the expander arrow in the lower right corner to see all properties.

Transforming text

You can transform text blocks in the same ways you can transform other objects. You can scale, rotate, skew, and flip text to create unique text effects.

You can still edit the transformed text, although severe transformations may make the text difficult to read. When a text block transformation causes text to be resized or scaled, the resulting font size appears in the Property inspector when the text is selected.

Converting text to paths

You can convert text to paths and then edit the shapes of the letters as you would any vector object. All vector-editing tools are available after you convert text to paths. However, you can no longer edit it as text.

To convert selected text to paths:

- Choose Text > Convert to Paths.

Text converted to paths retains all of its visual attributes, but you can edit it only as paths. You can edit the converted text as a group or edit the converted characters individually.



To edit converted text character paths individually, do one of the following:

- Select the converted text with the Subselection tool.
- Select the converted text and choose Modify > Ungroup.

You can edit the individual converted character paths using the vector-editing tools. For more information on editing paths, see [“Editing paths” on page 71](#).

You can create a composite path from a text object that was created by converting text to paths.

To create a composite path from a path group that was created by converting text to paths:

- 1 Select the path group.
- 2 Choose Modify > Ungroup.
- 3 Choose Modify > Combine Paths > Join.

Importing text

You can copy text from a source document and paste into the current Fireworks document, or you can drag it from the source to the current document. You can also open or import an entire text file in Fireworks.

Fireworks can import RTF (rich text format) and ASCII (plain text) formats.

To open or import a text file:

- 1 Choose File > Open or File > Import.
- 2 Navigate to the folder containing the file.
- 3 Choose the file and click OK.

Photoshop text

You can open or import a Photoshop file containing text. You can also copy text from a Photoshop file and paste into the current Fireworks document or drag it from the Photoshop file to the current document. For more information, see Fireworks Help.

RTF files

When importing RTF text, Fireworks maintains these attributes:

- Font, size, and style (bold, italic, underline)
- Alignment (left, right, center, justified)
- Leading
- Baseline shift
- Range kerning
- Horizontal scale
- Color of the first character

All other RTF information is ignored.

In Fireworks, you cannot import RTF text by copying and pasting or dragging and dropping.

ASCII text

You can import ASCII text using any of the import methods. Imported ASCII text is set to the current default font, 12 pixels high, and to the current fill color.

Handling missing fonts

If you open a document in Fireworks that contains fonts not installed on your computer, Fireworks asks if you want to replace the fonts or maintain their appearance. This is useful if you share files with users on other computers that may not have the same fonts installed.

Choosing Maintain Appearance replaces the text with a bitmap image that represents the appearance of the text in its original font. You can still edit the text, but when you do so, Fireworks replaces the bitmap image with a font that's installed on your system. This can cause the appearance of the text to change.

You can choose fonts to replace the missing fonts. After you replace fonts, the document opens and you can edit and save the text. When the document is reopened on a computer that contains the original fonts, Fireworks remembers and uses the original fonts.

To select a replacement font:

- 1 Open a document with missing fonts.
The Missing Fonts dialog box opens.
- 2 Choose a missing font from the Change Missing Font list.
- 3 Do one of the following:
 - Choose a replacement font from the To list.
 - Choose to display the text in the default system font.
 - To leave the missing font as is, click No Change.
- 4 Click OK.
The next time you open a document with the same missing fonts, the Missing Fonts dialog box includes the font you chose.

Checking spelling

You can use the Check Spelling command in the Text menu to check spelling for specific text blocks or all text in a document.

To spell-check text:

- 1 Select one or more text blocks. If no text blocks are selected, Fireworks checks spelling in the entire document.
- 2 Choose Text > Check Spelling.
- 3 If you have not checked spelling before in Fireworks, you see a dialog box asking you to choose a dictionary. Click OK to close the dialog box. Choose a language from the Dictionary list, and click OK.

If you don't choose a language, Fireworks prompts you to choose a language dictionary every time you spell-check a document.

Note: The Macromedia.tlx option is always selected at the top of the Dictionary list. For more information about this option, see [“Customizing spell checking” on page 95](#).

- 4 The Check Spelling dialog box opens. For each word found, choose the appropriate option:

Add to Personal adds the unrecognized word to your personal dictionary.

Ignore skips the current instance of the unrecognized word.

Ignore All skips all instances of the unrecognized word during the current spell-check session. The next time you spell-check, Fireworks once again identifies the word as unrecognized.

Change replaces the current instance of the unrecognized word with text that you type in the Change To box or with the selection in the Suggestions list.

Change All replaces all instances of the unrecognized word in the same manner.

Delete removes a duplicate word when one is found.

When it finishes checking the spelling in a document, Fireworks closes the Check Spelling dialog box and displays a message indicating that the spell-check is complete.

Customizing spell checking

You can customize the way Fireworks spell-checks documents using the Spelling Setup dialog box.

From here you can specify one or more language dictionaries for Fireworks to use during spell checking, as well as edit the words in your personal dictionary. You can also specify which items you want Fireworks to spell-check, including Internet and file addresses.

To customize spell checking in Fireworks:

- 1 Do one of the following:
 - Choose Text > Spelling Setup.
 - Click the Setup button in the Check Spelling dialog box.
- 2 Choose the desired options in the Spelling Setup dialog box:
 - Choose one or more language dictionaries.

Note: The Macromedia.tlx option is always selected at the top of the dictionary list. This is the file that contains your custom spelling dictionary.

- Browse for a custom dictionary by clicking the folder icon beside the Personal Dictionary Path text box.
 - Edit the custom dictionary by clicking the Edit Personal Dictionary button and adding, deleting, or modifying words in the list.
 - Choose the types of words you want to include in the spell-check.
- 3 Click OK.

Using the Text Editor

In Fireworks 4 and previous versions, the Text Editor was used to create and edit text. All text-editing and formatting options found in the Text Editor are now located in the Property inspector. However, you still have access to the Text Editor through the Text menu.

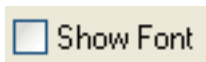
The Text Editor is useful for working with text that might be difficult to edit onscreen, such as large text blocks, text attached to a path, or text with hard-to-read fonts and sizes. You can choose to display such text in the system font and default size if necessary to make editing easier.

To display the Text Editor:

- 1 Select a text block and choose Text > Editor.
- 2 Modify and format the text using the options available.
- 3 Click OK to apply changes and close the Text Editor.

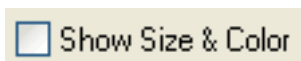
To view text in the system font:

- Deselect Show Font in the Text Editor.



To view text in the default size:

- Deselect Show Size & Color in the Text Editor.



CHAPTER 5

Applying Color, Strokes, and Fills

Macromedia Fireworks MX 2004 has a wide range of panels, tools, and options for organizing and choosing colors, and applying colors to bitmap images and vector objects.

In the Swatches panel, you can choose a preset swatch group such as Color Cubes, Continuous Tone, or Grayscale, or you can create custom swatch groups that include your favorite colors or colors approved by your client. In the Color Mixer, you can choose a color model such as Hexadecimal, RGB, or Grayscale, and then choose stroke and fill colors directly from the color bar or by entering specific color values.

Throughout the Fireworks workspace you will find color boxes that show the current color choices for options and object characteristics. When you click a color box, you see a color pop-up window from which you can choose a color for the color box. Move the pointer away from an open color pop-up window, and you can click any color on your screen to apply it to the color box.

The Colors section of the Tools panel contains stroke and fill color controls and other color options. The Bitmap section contains the Paint Bucket, Gradient Fill, and Eyedropper tools, which you can use to apply color to bitmap selections, areas of similar color, and vector objects. For information on these bitmap tools, see [Chapter 2, “Working with Bitmaps,” on page 29](#).

Note: For information about color correction using Live Effects and filters, see [“Adjusting bitmap color and tone” on page 39](#).

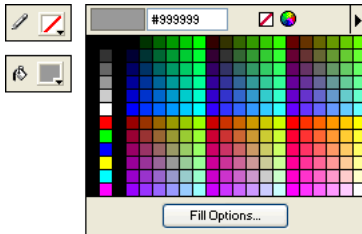
Using the Colors section of the Tools panel

The Colors section of the Tools panel contains controls for activating the Stroke Color and Fill Color boxes, which in turn determine whether the strokes or fills of selected objects are affected by color choices. Also, the Colors section has controls for quickly resetting colors to the default, setting the stroke and fill color settings to None, and swapping fill and stroke colors.

To make the Stroke Color or Fill Color box active:

- Click the icon next to the Stroke Color or Fill Color box in the Tools panel. The active color box area appears as a depressed button in the Tools panel.

Note: The Paint Bucket tool fills pixel selections and vector objects with the color shown in the Fill Color box in the Tools panel.



Color boxes in the Tools panel and the color pop-up window

To reset colors to the default:

- Click the Default Colors button in the Tools panel or in the Color Mixer.

To remove the stroke and fill from selected objects using the No Stroke or Fill button:

- 1 Click the No Stroke or Fill button in the Colors section of the Tools panel.
The active characteristic changes to a stroke or fill of None.
- 2 To set the inactive characteristic to None as well, click the No Stroke or Fill button again.

Note: You can also set the fill or stroke of selected objects to None by clicking the Transparent button in any Fill Color or Stroke Color box pop-up window, or by choosing None from the Fill Options or Stroke Options pop-up menu in the Property inspector.

To swap fill and stroke colors:



- Click the Swap Colors button in the Tools panel or in the Color Mixer.

Organizing swatch groups and color models

The Swatches panel and Color Mixer combine to form the Colors panel group. In the Swatches panel you can view, change, create, and edit swatch groups, as well as choose stroke and fill colors. You can use the Color Mixer to choose a color model, mix stroke and fill colors by dragging color value sliders or entering color values, and choose stroke and fill colors directly from the color bar.

Applying colors using the Swatches panel

The Swatches panel displays all the colors in the current swatch group. You can use the Swatches panel to apply stroke and fill colors to selected vector objects or text.

To apply a color to the stroke or fill of a selected object using the Swatches panel:

- 1 Click the icon next to the Stroke Color or Fill Color box in the Tools panel or Property inspector to make it active.
- 2 If the Swatches panel is not already open, choose Window > Swatches.
- 3 Click a swatch to apply the color to the stroke or fill of the selected object. The color appears in the active Stroke Color or Fill Color box.

Changing swatch groups

You can easily switch to another swatch group or create your own. The Swatches panel Options menu contains the following swatch groups: Color Cubes, Continuous Tone, Macintosh System, Windows System, and Grayscale. You can import custom swatches from color palette files saved as ACT or GIF files.

To choose a swatch group:

- Choose a swatch group from the Swatches panel Options menu.

Note: Choosing Color Cubes returns you to the default swatch group.

To choose a custom swatch group:

- 1 Choose Replace Swatches from the Swatches panel Options menu.
- 2 Navigate to the folder and choose a swatch file.
- 3 Click Open.

The color swatches in the swatch file replace the previous swatches.

Note: For information on creating a custom swatch group, see [“Customizing the Swatches panel” on page 100](#) and [“Saving palettes” on page 240](#).

To add swatches from an external color palette to the current swatches:

- 1 Choose Add Swatches from the Swatches panel Options menu.
- 2 Navigate to the desired folder and choose a color palette file.

Note: Fireworks can add new swatches from palettes exported as ACT or GIF files.

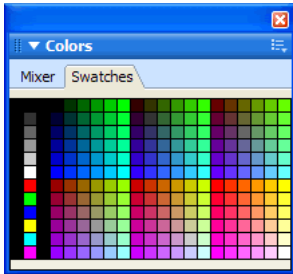
- 3 Click OK.

Fireworks adds the new swatches at the end of the current swatches.

Customizing the Swatches panel

You can add, delete, replace, and sort color swatches or entire swatch groups using the Swatches panel.

Note: Choosing Edit > Undo does not undo swatch additions or deletions.



Swatches panel

To add a color to the Swatches panel:

- 1 Choose the Eyedropper tool from the Tools panel.
- 2 Choose the number of pixels to sample from the Sample pop-up menu in the Property inspector: 1 pixel, 3x3 Average, or 5x5 Average.
- 3 Click anywhere inside any open Fireworks Document window to sample a color.
- 4 Move the tip of the eyedropper pointer to the open space after the last swatch in the Swatches panel.

The eyedropper pointer becomes the paint bucket pointer.

- 5 Click to add the swatch.

Tip: When you choose Snap to Web Safe in the Options menu of the color pop-up window, any non-websafe color you pick up with the eyedropper pointer is changed to the nearest websafe color.

To replace a swatch with another color:

- 1 Choose the Eyedropper tool from the Tools panel.
- 2 Choose the number of pixels to sample from the Sample pop-up menu in the Property inspector: 1 pixel, 3x3 Average, or 5x5 Average.
- 3 Click anywhere inside any Fireworks Document window to sample a color.
- 4 Hold down Shift and place the pointer over a swatch in the Swatches panel.

The pointer becomes the paint bucket pointer.

- 5 Click the swatch to replace it with the new color.

To delete a swatch from the Swatches panel:

- 1 Hold down Control (Windows) or Command (Macintosh) and place the pointer over a swatch.
The pointer becomes the scissors pointer.
- 2 Click the swatch to delete it from the Swatches panel.

To save a selection of sampled colors:

- 1 Add sampled colors to the Swatches panel.
- 2 Choose Save Swatches from the Swatches panel Options menu.
The Export Swatches dialog box opens.
- 3 Choose a filename and directory and click Save.

Clearing and sorting swatches

You can clear and sort swatches using the Swatches panel Options menu.

To clear or sort swatches:

- Choose one of the following from the Swatches panel Options menu:
Clear Swatches clears the entire Swatches panel.
Sort by Color sorts the swatches by color value.

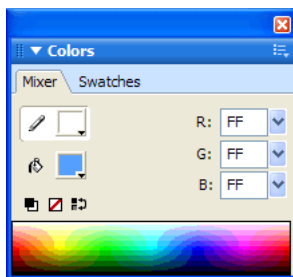
Creating colors in the Color Mixer

In the Color Mixer, you can create colors by dragging sliders or entering values for each component of a color model such as RGB, Hexadecimal, or CMY. The color you create is applied to the active Stroke Color or Fill Color box. The Color Mixer also has a color bar displaying the range of colors in the current color model. You can click anywhere in the color bar to apply a color. You can also click the system color picker button to choose a Windows or Macintosh system color.

Tip: Although CMY is a color model option, graphics directly exported from Fireworks are not ideal for printing. To repurpose exported Fireworks graphics for print, you can import them into FreeHand MX, which automatically performs CMYK conversion of RGB images when output to digital color separations. For more information, see FreeHand documentation.

Mixing colors in the Color Mixer

You can use the Color Mixer to view the values of the active color and edit color values to create new colors.



By default, the Color Mixer identifies RGB colors as hexadecimal, displaying hexadecimal color values for red (R), green (G), and blue (B) color components. Hexadecimal RGB values are calculated based on a range of values from 00 to FF.

Color model	Mode of color expression
RGB	Values of Red, Green, and Blue, where each component has a value from 0 to 255. 0-0-0 is black and 255-255-255 is white.
Hexadecimal	RGB values of Red, Green, and Blue, where each component has a hexadecimal value from 00 to FF. 00-00-00 is black and FF-FF-FF is white.
HSB	Values of Hue, Saturation, and Brightness, where Hue has a value from 0 to 360 degrees, and Saturation and Brightness have a value from 0 to 100%.
CMY	Values of Cyan, Magenta, and Yellow, where each component has a value from 0 to 255. 0-0-0 is white and 255-255-255 is black.
Grayscale	A percentage of black. The single Black (K) component has a value from 0 to 100%, where 0 is white, 100 is black, and values in between are shades of gray.

You can choose alternative color models from the Color Mixer Options menu. The current color's component values change with each new color model.

To display the Color Mixer:

- Choose Window > Color Mixer.

To apply a color from the color bar to a selected vector object:

- 1 Click the icon next to the Stroke Color or Fill Color box in the Color Mixer.
- 2 Move the pointer over the color bar.
The pointer becomes the eyedropper pointer.
- 3 Click to pick a color.
The color is applied to the selected object and becomes the active stroke or fill color.

To pick a color from the Color Mixer:

- 1 Deselect all objects before mixing a color to prevent unwanted object editing as you mix colors.
- 2 Click either the Stroke Color or Fill Color box to make it the destination for the new color.
- 3 Choose a color model from the Color Mixer Options menu.
- 4 Do any of the following to specify color component values:
 - Enter values in the color component text boxes.
 - Use the pop-up sliders.
 - Pick a color from the color bar.

You can add this color to the Swatches panel to reuse. For more information, see [“Customizing the Swatches panel” on page 100](#).

To cycle the color bar through the color models:

- Shift-click the color bar at the bottom of the Color Mixer.

Note: The options in the Color Mixer do not change.

Creating colors using the system color pickers

You can create colors using the Windows System or the Macintosh System dialog boxes, instead of using the Color Mixer and Swatches panel.

To pick a color from the system color picker:

- 1 Click any color box.
- 2 Choose Windows OS or Mac OS from any color pop-up window Options menu.
The system color swatches are displayed in the pop-up window.
- 3 Choose a color from the system color picker.
The color becomes the new stroke or fill color.

For information on adding a color to the Swatches panel from the color picker, see [“Customizing the Swatches panel” on page 100](#).

Viewing color values

In addition to the Color Mixer and color pop-up window, you can use the Info panel to identify color values.

To view the color value of any part of your document using the Info panel:

- 1 Click the Eyedropper tool in the Tools panel.
- 2 Choose Window > Info to display the Info panel.
- 3 Move the pointer over the object containing the color you want to view (Windows only).

To view the color value of the active stroke or fill color, do one of the following:

- Choose Window > Color Mixer for RGB or other color system values.
- Click a color box to open the color pop-up window and view the hexadecimal value at the top of the window.
- Place the pointer over a color box and read the tooltip (Windows only).

Note: By default, the color's RGB values appear in the Info panel and the Color Mixer, and its hexadecimal value appears in the color pop-up window, as well as the color box tooltip in Windows. However, you can change the color model displayed in the Color Mixer or the Info panel anytime.

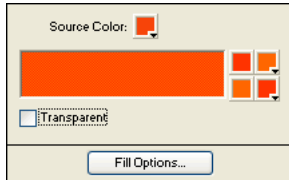
To display color information for another color model:

- Choose another color model from the Info panel Options menu or the Color Mixer Options menu.

Dithering with websafe colors

Sometimes you might need to use a color that is not a websafe color. For example, your company logo may use a color that is not websafe. To approximate a websafe color that doesn't shift or dither when exported with a websafe palette, you use a web dither fill.

Note: Web dithering can increase the size of the file.



Two websafe colors create a web dither fill.

To use the web dither fill:

- 1 Select an object containing a non-websafe color.
- 2 Choose Web Dither from the Fill Options pop-up menu in the Property inspector.
- 3 Click the Fill Color box in the Property inspector.

The color pop-up window opens, displaying options for web dither fills. The object's non-websafe color appears in the Source color box in the Fill Options window. The two websafe dither colors appear in the color boxes to the right. The web dither appears on the object and becomes the active fill color.

Note: Setting the edge of a web dither fill to Anti-Alias or Feather results in colors that are not websafe.

- 4 Click outside the pop-up window to close it.

To create the illusion of a true transparent fill in a web browser:

- 1 Select the object to which you want to apply a transparent fill.
- 2 Choose Web Dither from the Fill Options pop-up menu in the Property inspector.
- 3 Click the Fill Color box in the Property inspector. The color pop-up window opens, displaying options for web dither fills.
- 4 Click the Transparent option.

The color boxes on the right side of the pop-up window change to reflect your selection, and the object on the canvas becomes semi-opaque, or translucent.

- 5 Click outside the pop-up window to close it.
- 6 Export the object as a GIF or PNG file with Index Transparency or Alpha Channel Transparency set. For more information on exporting files with transparency, see [“Making areas transparent” on page 241](#).

When you view the graphic in a web browser, the web page background shows through every other pixel of the transparent web dither fill, creating the appearance of transparency.

Note: Not all browsers support PNG files.

Using color boxes and color pop-up windows

Throughout Fireworks you will find color boxes—from the Colors section of the Tools panel to the Property inspector to the Color Mixer. Each displays the current color assigned to the associated object property.

Choosing colors from a color pop-up window

When you click any color box, a color pop-up window similar to the Swatches panel opens. You can choose to display the same swatches in a color pop-up window as those that are displayed in the Swatches panel, or you can display different swatches.

To choose a color for a color box:

- 1 Click the color box.

The color pop-up window opens.

- 2 Do one of the following:

- Click a swatch to apply it to the color box.
- Click the eyedropper pointer on a color anywhere on the screen to apply it to the color box.
- Click the Transparent button in the pop-up window to make the stroke or fill transparent.

To display the current Swatches panel swatch group in the color pop-up window:

- Choose Swatches Panel from the color pop-up window Options menu.

To display a different swatch group in the color pop-up window:

- Choose a swatch group from the color pop-up window Options menu. Choosing a swatch group here does not affect the Swatches panel.

Sampling colors from a color pop-up window

When a color pop-up window is open, the pointer becomes a special eyedropper that can take up colors from almost anywhere on the screen. This is known as *sampling*.

To sample a color from anywhere on the screen for the current color box:

- 1 Click any color box.



The color pop-up window opens, and the pointer changes to an eyedropper.

- 2 Click anywhere in the Fireworks workspace to choose a color for the color box.

The color is applied to the characteristic or feature associated with the color box, and the color pop-up window closes.

Tip: Shift-click to choose a websafe color.

Working with strokes

Using the Property inspector, the Stroke Options pop-up menu, and the Edit Stroke dialog box, you can have full control of every brush nuance, including ink amount, tip size and shape, texture, edge effect, and aspect.

Applying strokes

You can change the stroke attributes of the Pen, Pencil, and Brush tools so that the next vector object you draw has the new stroke attributes, or you can apply stroke attributes to an object or path after you draw it.

The current stroke color appears in the Stroke Color box in the Tools panel, the Property inspector, and the Color Mixer. You can change the stroke color of a drawing tool or selected object from any of these three panels.



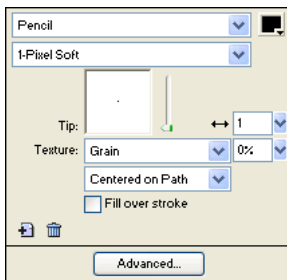
The pencil icon indicates the Stroke Color box in the Tools panel, the Property inspector, and the Color Mixer.

To change stroke attributes of selected objects, do one of the following:

- Choose from among the stroke attributes in the Property inspector.

Tip: Choose Stroke Options from the Stroke Options pop-up menu for more attributes.

- Click the Stroke Color box in the Tools panel and click Stroke Options. Choose from among the stroke attributes in the Stroke Options pop-up window.



Use the options in the Property inspector or the Stroke Options pop-up window to change the stroke applied to an object.

To change the stroke color of a drawing tool:

- 1 Press Control+D (Windows) or Command+D (Macintosh) to deselect all objects.
- 2 Choose a drawing tool in the Tools panel.
- 3 Click the Stroke Color box in the Tools panel or Property inspector to open the color pop-up window.
- 4 Choose a color for the stroke from the set of swatches.
- 5 Drag to draw the object.

Note: A newly created stroke assumes the color currently displayed in the Stroke Color box.

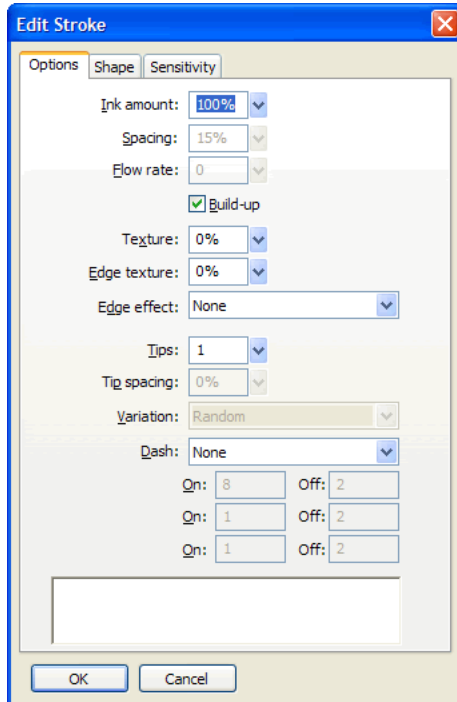
To remove all stroke attributes from a selected object, do one of the following:

- Choose None from the Stroke Options pop-up menu in the Property inspector or the Stroke Options pop-up window.
- Click the Stroke Color box in either the Tools panel or the Property inspector and click the Transparent button.



Creating custom strokes

You can use the Edit Stroke dialog box to change specific stroke characteristics.



The Edit Stroke dialog box has three tabs: Options, Shape, and Sensitivity.

The stroke preview at the bottom of each tab shows the current brush with the current settings. The current pressure- and speed-sensitivity settings are reflected in the preview by a stroke that tapers or fades or otherwise changes from left to right.

To open the Edit Stroke dialog box:

- 1 Do one of the following to open the Stroke Options pop-up window:
 - Choose Stroke Options from the Stroke Options pop-up menu in the Property inspector.
 - Choose Stroke Options from the Stroke Color box pop-up window in the Tools panel.
- 2 Click Advanced.

The Edit Stroke dialog box opens.

To set general brush stroke options:

- 1 On the Options tab of the Edit Stroke dialog box, set the ink amount, spacing, and flow rate. Higher flow rates create brush strokes that flow over time, as with an airbrush.
- 2 To overlap brush strokes for dense strokes, choose Build-up.
- 3 To set the stroke texture, change the Texture option. The higher the number, the more apparent the texture becomes.
- 4 To set texture on the edges, enter a number in the Edge Texture text box and choose an edge effect from the Edge Effect pop-up menu.
- 5 Set the number of tips you want the brush stroke to have. For multiple tips, enter a Tip Spacing value and choose the color variation method. You can choose Random, Uniform, Complementary, Hue, or Shadow.
- 6 To choose a dotted or dashed line, select an option from the Dash pop-up menu.
- 7 To set the lengths of dashes and spaces for a dotted line, use the three sets of On and Off text input boxes to control the first, second, and third dashes, respectively.
- 8 Click Apply to apply the settings to selected strokes, then click OK.

To modify the brush tip:

- 1 On the Shape tab of the Edit Stroke dialog box, select Square for a square tip, or deselect it for a round tip.
- 2 Enter values for the brush tip size, edge softness, tip aspect, and tip angle.
- 3 Click Apply, then click OK.

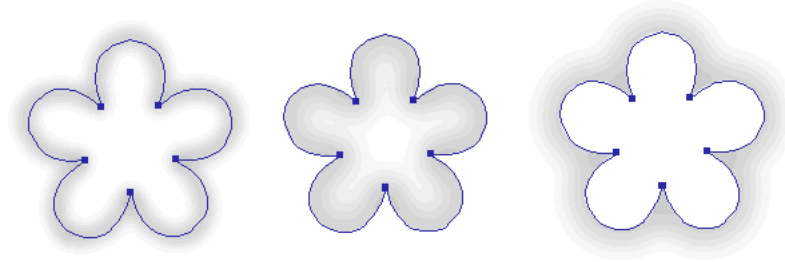
Fireworks has stroke settings for fine-tuning the stroke attributes controlled by speed and pressure when you use a Wacom pressure-sensitive tablet and pen. You can choose the stroke attribute to control with the pen.

To set stroke sensitivity:

- 1 On the Sensitivity tab of the Edit Stroke dialog box, choose a stroke property such as Size, Ink Amount, or Saturation from the Stroke Property pop-up menu.
- 2 From the Affected By options, choose the degree to which sensitivity data affects the current stroke property.
- 3 Click OK.

Placing strokes on paths

By default, an object's brush stroke is centered on a path. You have the option of placing the brush stroke completely inside or outside the path. This allows you to control the overall size of stroked objects and to create effects such as strokes on the edges of beveled buttons.



Centered stroke, stroke inside, and stroke outside

You can use the Stroke pop-up menu in the Stroke Options window to reorient brush strokes.

To move a brush stroke inside or outside the selected path:

- 1 Click the Stroke Color box in the Tools panel or the Property inspector to open the color box pop-up window.
- 2 Choose an option from the Location of Stroke Relative to Path pop-up menu: Inside, Centered, or Outside.
- 3 Optionally, choose the Fill over Stroke option.

Normally, the stroke overlaps the fill. Choosing Fill over Stroke draws the fill over the stroke. If you choose this option for an object with an opaque fill, any part of the stroke that falls inside the path is obscured. A fill with a degree of transparency may tint or blend with a brush stroke inside a path.

Creating stroke styles

You can change specific stroke characteristics such as ink amount, tip shape, and tip sensitivity, and save the custom stroke as a style for reuse across many documents.

To create custom strokes:

- 1 Do one of the following:
 - Click the Stroke Color box in the Tools panel and then click Stroke Options.
 - Choose Stroke Options from the Stroke Options pop-up menu in the Property inspector.The Stroke Options pop-up window opens.
- 2 Edit the desired brush stroke attributes.
- 3 Save your custom stroke attributes as a style. For more information, see [“Creating and deleting styles” on page 156](#).

Working with fills

Using the Property inspector, the Fill Options pop-up menu, the Fill Options pop-up window, and the Gradient pop-up window, as well as a collection of bitmap textures and patterns, you can create a wide variety of fills for vector objects and text. Using the Paint Bucket or Gradient tool, you can also fill pixel selections based on current fill settings.

Setting fill attributes of the drawing tools

You can set the fill attributes of the Rectangle, Rounded Rectangle, Ellipse, and Polygon drawing tools that are applied to objects as you draw. The current fill appears in the Fill Color box in the Property inspector, the Tools panel, and the Color Mixer. You can use any of these panels to change a drawing tool's fill.



The paint bucket icon indicates the Fill Color box in the Tools panel, the Property inspector, and the Color Mixer.

To change the solid fill color of applicable vector drawing tools and the Paint Bucket tool:

- 1 Choose a vector drawing tool or the Paint Bucket tool.
- 2 Do one of the following:
 - Press Control+D (Windows) or Command+D (Macintosh) to deselect all objects, and then click the Fill Color box in the Property inspector to open the Fill Color pop-up window.
 - Click the Fill Color box in the Tools panel or Color Mixer to open the color pop-up window.
- 3 Choose a color for the fill from the set of swatches, or sample a color from anywhere on the screen using the eyedropper pointer.
- 4 Use the tool as desired.

Note: Choosing the Text tool always causes the Fill Color box to revert to the last solid text color used by the Text tool.

Editing solid fills

A solid fill is a solid color that fills the interior of an object. You can change an object's fill color in the Tools panel, Property inspector, or Color Mixer.

To edit a selected vector object's solid fill:

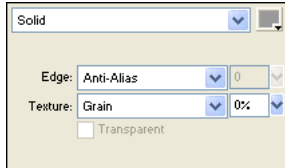
- 1 Click the Fill Color box in the Property inspector, Tools panel, or Color Mixer to open the color pop-up window.
- 2 Choose a swatch from the color pop-up window.
The fill appears in the selected object and becomes the active fill color.

Applying gradient and pattern fills

You can change fills to display a variety of solid, dithered, pattern, or gradient characteristics that range from solid colors to gradients. These characteristics resemble satin, ripples, folds, or gradients that conform to the contour of the object to which you apply them. Additionally, you can change various attributes of a fill, such as color, edge, texture, and transparency.

You can choose from a number of preset gradient and pattern fills, or you can create your own.

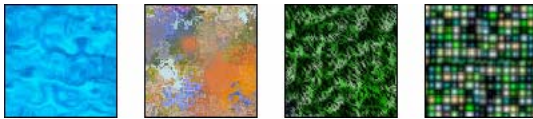
Note: A newly created fill assumes the current color displayed in the Fill Color box in the Tools panel.



Use the Fill options in the Property inspector or the Fill Options pop-up window to edit fill attributes.

Applying a pattern fill

You can fill a path object with a bitmap graphic, known as a *pattern fill*. Fireworks ships with more than a dozen pattern fills, including Berber, Leaves, and Wood.



To apply a pattern fill to a selected object:

- 1 Do one of the following:
 - Choose Pattern from the Fill Options pop-up menu in the Property inspector.
 - Click the Fill Color box in the Tools panel, click Fill Options, and choose Pattern from the Fill Options pop-up menu.
- 2 Choose a pattern from the Pattern Name pop-up menu.

The pattern fill appears in the selected object and becomes the active fill color.

Adding a custom pattern

You can set a bitmap file as a new pattern fill. You can use files with these formats as patterns: PNG, GIF, JPEG, BMP, TIFF, and PICT (Macintosh only). When a pattern fill is a 32-bit transparent image, the transparency affects the fill when used in Fireworks. If an image is not 32-bit, it becomes opaque.

When you add a new pattern, its name appears in the Pattern Name pop-up menu of the Fill Options pop-up window.

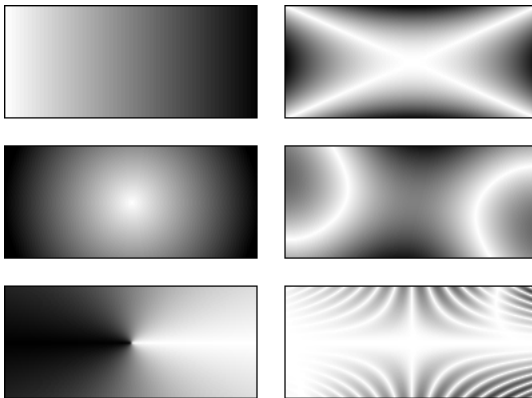
To create a new pattern from an external file:

- 1 With vector object properties displayed in the Property inspector, choose Pattern from the Fill Options pop-up menu.
- 2 Click the Fill Color box and choose Other from the Pattern Name pop-up menu.
- 3 Navigate to the bitmap file you want to use as the new pattern, and click Open.

The new pattern is added to the Pattern Name list in alphabetical order.

Applying a gradient fill

Fill categories other than None, Solid, Pattern, and Web Dither are gradient fills. These fills blend colors to create various effects.



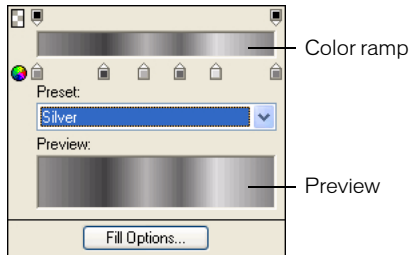
Objects with various gradient fills

To apply a gradient fill to a selected object:

- Choose a gradient from the Fill Options pop-up menu in the Property inspector. The fill appears in the selected object and becomes the active fill.

Editing a gradient fill

You can edit the current gradient fill by clicking any Fill Color box and then using the Edit Gradient pop-up window.



Edit Gradient pop-up window

To open the Edit Gradient pop-up window:

- 1 Select an object that has a gradient fill or choose a gradient fill from the Fill Options pop-up menu in the Property inspector.
- 2 Click the Fill Color box in the Property inspector or Tools panel to open the pop-up window.
The Edit Gradient pop-up window opens with the current gradient in the color ramp and preview.

To add a new color or opacity swatch to the gradient, do one of the following:

- To add a color swatch, click the area below the gradient color ramp.
- To add an opacity swatch, click the area above the gradient color ramp.

To remove a color or opacity swatch from the gradient:

- Drag the swatch away from the Edit Gradient pop-up window.

To set or change the color of a color swatch:

- 1 Click the color swatch.
- 2 Choose a color from the pop-up window.

To set or change the transparency of an opacity swatch:

- 1 Click the opacity swatch.
- 2 Do one of the following:
 - Drag the slider to the percentage of transparency, where 0 is completely transparent and 100 is completely opaque.
 - Enter a numeric value from 0 to 100 to set the opacity value.

Note: The transparency checkerboard shows through the gradient in transparent areas.

- 3 When you have finished editing the gradient, press Enter or click outside the Edit Gradient pop-up window. The gradient fill appears in any selected objects and becomes the active fill.

To adjust the transition between colors in the fill:

- Drag color swatches left or right.

Creating fills with the Gradient tool

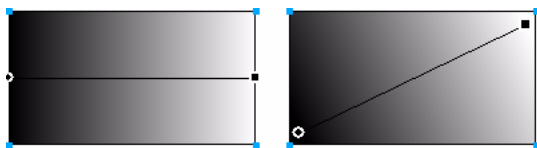
The Gradient tool is in the same tool group as the Paint Bucket tool. This new tool works much as the Paint Bucket tool does, but it fills an object with a gradient instead of a solid color. Like the Paint Bucket tool, it retains the properties of the last-used element.

To use the Gradient tool:

- 1 Click the Paint Bucket tool in the Tools panel and choose the Gradient tool from the pop-up menu.
- 2 Choose from the following attributes in the Property inspector:
 - Fill Options** is a pop-up menu from which you can choose a gradient type.
 - Fill Color box**, when clicked, displays the Edit Gradient pop-up window, from which you can set a variety of color and transparency options.
 - Edge** determines if the gradient has a hard, anti-aliased, or feathered fill edge. If you choose a feathered edge, you can specify the amount of the feathering.
 - Texture** gives you many options to choose from, including Grain, Metal, Hatch, Mesh, or Sandpaper.
- 3 Click and drag the pointer to establish a starting point of the gradient as well as the direction and length of the gradient area.

Transforming and distorting fills

You can move, rotate, skew, and change the width of an object's pattern or gradient fill. When you use the Pointer or Gradient tools to select an object with a pattern or gradient fill, a set of handles appears on or near the object. You can drag these handles to adjust the object's fill.



Use the fill handles to interactively adjust a pattern or gradient fill.

To move the fill within an object:

- Drag the round handle, or click in a new location in the fill using the Gradient tool.

To rotate the fill:

- Drag the lines connecting the handles.

To adjust the fill width and skew:

- Drag a square handle.

Setting hard-edged, anti-aliased, or feathered fill edges

In Fireworks, you can make the edge of a fill a regular hard line or soften the edge by anti-aliasing or feathering it. By default, edges are anti-aliased. Anti-aliasing smooths jagged edges that may occur on rounded objects, such as ellipses and circles, by subtly blending the edge into the background.

Feathering, however, produces a noticeable blending on either side of the edge. This softens the edge, creating an effect similar to a glow.

To change the edge of a selected object:

- 1 Do one of the following to display the Edge pop-up menu:
 - Click the Edge pop-up menu in the Property inspector.
 - Click the Fill Color box in the Tools panel, click Fill Options, and click the Edge pop-up menu.
- 2 Choose an edge option: Hard Edge, Anti-Alias, or Feather.
- 3 For a feathered edge, also choose the number of pixels on each side of the edge that are to be feathered.

The default is 10. You can choose from 0 to 100. The higher the level, the more feathering occurs.



About saving a custom gradient fill

To save the current gradient settings as a custom gradient for use across many documents, you must create a style. For more information, see [“Creating and deleting styles” on page 156](#).

Removing a fill

You can easily remove fill attributes from selected objects.

To remove the fill from a selected object, do one of the following:

- Choose None from the Fill Options pop-up menu in the Property inspector or from the Fill Options pop-up menu in the Fill Options pop-up window.
- Click any Fill Color box and click the Transparent button. This option removes only solid fills.



Adding texture to strokes and fills

You can add three-dimensional effects to both strokes and fills by adding texture. Fireworks provides several textures, or you can use external textures.

Adding texture to a stroke

Textures modify the brightness of the stroke, but not the hue, and give strokes a less mechanical, more organic look, as if you were applying paint to a textured surface. Textures are more effective when used with wide strokes. You can add a texture to any stroke. Fireworks ships with several textures to choose from, such as Chiffon, Oilslick, and Sandpaper.



Use the Stroke options in the Property inspector or the Stroke Options pop-up window to add a texture to a brush stroke.

To add texture to the stroke of a selected object:

- 1 Do one of the following to open the Stroke Texture pop-up menu:
 - Click the Stroke Texture pop-up menu in the Property inspector.
 - Click the Stroke Color box in the Tools panel, click Stroke Options, and click the Texture pop-up menu.
- 2 Do one of the following:
 - Choose a texture from the pop-up menu.
 - Choose Other from the pop-up menu and navigate to a texture file to use an external texture.

Note: You can apply textures from files with these formats: PNG, GIF, JPEG, BMP, TIFF, and PICT (Macintosh only).

- 3 Enter a percentage from 0 to 100 to control the depth of the texture.
Increasing the percentage increases the texture intensity.

Adding texture to a fill

Textures modify the brightness of a fill, but not the hue, and give fills a less mechanical, more organic look. You can add a texture to any fill. Fireworks ships with several textures from which to choose, such as Chiffon, Oilslick, and Sandpaper. You can also use bitmap files as textures. This allows you to create almost any type of custom texture.

To add texture to the fill of a selected object:

- 1 Do one of the following to open the Fill Texture pop-up menu:
 - Click the Fill Texture pop-up menu in the Property inspector.
 - Click the Fill Color box in the Tools panel, click Fill Options, and click the Texture pop-up menu.
- 2 Do one of the following:
 - Choose a texture from the pop-up menu.
 - Choose Other from the pop-up menu and navigate to a texture file to use an external texture.
- 3 Enter a percentage from 0 to 100 to control the depth of the texture.
Increasing the percentage increases the texture intensity.
- 4 Choose Transparent to introduce a level of transparency to the fill.
The Texture percentage also controls the degree of transparency.

Adding a custom texture

You can use bitmap files from Fireworks and other applications as textures. You can apply textures from files with these formats: PNG, GIF, JPEG, BMP, TIFF, and PICT (Macintosh only).

When you add a new texture, its name appears in the Texture Name pop-up menu.

To create a new texture from an external file:

- 1 With vector object properties displayed in the Property inspector, choose Other from either of the Texture Name pop-up menus.
- 2 Navigate to the bitmap file you want to use as the new texture, and click Open.
The new texture is added to the Texture Name list in alphabetical order.

CHAPTER 6

Using Live Effects

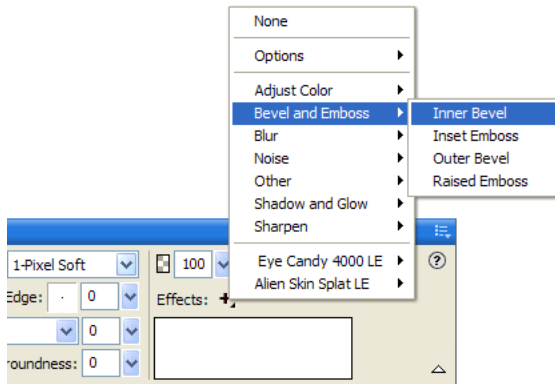
Macromedia Fireworks MX 2004 Live Effects are enhancements that you can apply to vector objects, bitmap images, and text. Live Effects include bevels and embossing, drop shadows and glows, color correction, and blurring and sharpening. You can apply Live Effects to selected objects directly from the Property inspector.

Fireworks automatically updates Live Effects when you edit objects that have them applied. After you apply a Live Effect, you can change its options anytime, or rearrange the order of effects to experiment with a combined effect. You can turn Live Effects on and off or delete them in the Property inspector. When you remove an effect, the object or image returns to its previous appearance.

Some effects now listed among Fireworks Live Effects—such as Auto Levels, Gaussian Blur, and Unsharp Mask—were once available only as irreversible plug-ins or filters. In addition to these, you can add third-party plug-ins to be used in Fireworks as Live Effects. If you prefer, you can use these filters in the traditional manner using the Filters menu. For more information, see [“Adjusting bitmap color and tone” on page 39](#).

Applying Live Effects

You can apply one or more Live Effects to selected objects using the Property inspector. Each time you add a new effect to the object, it is added to the list in the Effects pop-up menu in the Property inspector. You can turn each effect on or off.



Effects pop-up menu in the Property inspector

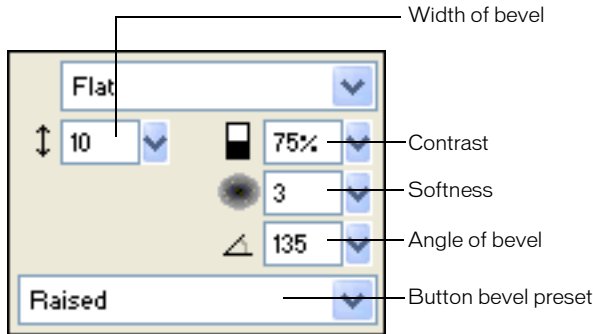
When you select objects eligible for Live Effects, the location of the Live Effects options differs slightly depending on whether the Property inspector is at full height or half height:

- When the Property inspector is maximized to full height, use the Add Effects button, the Delete Effects button, and the list of applied Live Effects displayed in the Property inspector.
- When the Property inspector is at half height, click Edit Effects to display the Add Effects button, the Delete Effects button, and the list of applied Live Effects.

Note: In *Using Fireworks MX 2004*, steps involving Live Effects assume the Property inspector is open at full height.

You can customize each Live Effect to get the look you want. When you choose Bevel, Blur, Emboss, Glow, Shadow, or Sharpen, a pop-up window opens in which you can adjust the effect settings. When you choose color correction effects, dialog boxes open containing controls to adjust color characteristics such as auto levels, brightness and contrast, hue and saturation, color inversion, curves, and color fill. When you choose a blur or sharpen effect, it is applied directly to the object.

Experiment with the settings until you get the look you want. If you want to change the effect settings later, see [“Editing Live Effects” on page 124](#).



Inner Bevel pop-up window

To apply a Live Effect to selected objects:

- 1 Click the Add Effects button in the Property inspector, then choose an effect from the Effects pop-up menu.

The effect is added to the Effects list for the selected object.

Tip: To apply a Live Effect so that it appears to affect only a pixel selection within an image, you can cut and paste the selection in place to create a new bitmap image, select it, and then apply the Live Effect.

- 2 If a pop-up window or dialog box opens, enter the settings for the effect and then do one of the following:
 - If the Live Effect has a dialog box, click OK.
 - If the Live Effect has a pop-up window, press Enter or click anywhere in the workspace.
- 3 Repeat steps 1 and 2 to apply more Live Effects.

Note: The order in which Live Effects are applied affects the overall effect. You can drag Live Effects to rearrange their stacking order. For more information, see [“Reordering Live Effects” on page 125](#).

To enable or disable an effect applied to an object:

- Click the check box next to the effect in the Effects list in the Property inspector.

To enable or disable all effects applied to an object:

- Click the Add Effects button in the Property inspector, then choose Options > All On or Options > All Off from the pop-up menu.

For information on permanently removing effects, see [“Removing Live Effects” on page 125](#).

Applying beveled edges

Applying a beveled edge to an object gives it a raised look. You can create an inner bevel or an outer bevel.



A rectangle, with Inner Bevel, and with Outer Bevel

To apply a beveled edge to a selected object:

- 1 Click the Add Effects button in the Property inspector, then choose a bevel option from the pop-up menu:
 - Bevel and Emboss > Inner Bevel
 - Bevel and Emboss > Outer Bevel
- 2 Edit the effect settings in the pop-up window.
- 3 Click outside the window or press Enter to close it.

Applying embossing

You can use the Emboss effect to make an image, object, or text appear inset into or raised from the canvas.



An object, with Inset Emboss, and with Raised Emboss

To apply an Emboss effect:

- 1 Click the Add Effects button in the Property inspector, then choose an emboss option from the pop-up menu:
 - Bevel and Emboss > Inset Emboss
 - Bevel and Emboss > Raised Emboss
- 2 Edit the effect settings in the pop-up window.
If you want the original object to appear in the embossed area, choose Show Object.
- 3 When you finish, click outside the window or press Enter to close it.

Note: For backward compatibility, Emboss effects on objects in older documents open with the Show Object option deselected.

Applying shadows and glows

Fireworks makes it easy to apply drop shadows, inner shadows, and glows to objects. You can specify the angle of the shadow to simulate the angle of the light shining on the object.



Drop Shadow, Inner Shadow, and Glow effects

To apply a shadow or inner shadow:

- 1 Click the Add Effects button in the Property inspector, then choose a shadow option from the pop-up menu:
 - Shadow and Glow > Drop Shadow
 - Shadow and Glow > Inner Shadow
- 2 Edit the effect settings in the pop-up window:
 - Drag the Distance slider to set the distance of the shadow from the object.
 - Click the color box to open the color pop-up window and set the shadow color.
 - Drag the Opacity slider to set the percentage of transparency in the shadow.
 - Drag the Softness slider to set the sharpness of the shadow.
 - Drag the Angle dial to set the direction of the shadow.
 - Select Knock Out to hide the object and display the shadow only.
- 3 When you finish, click outside the window or press Enter to close it.

To apply a glow:

- 1 Click the Add Effects button in the Property inspector, then choose Shadow and Glow > Glow.
- 2 Edit the effect settings in the pop-up window:
 - Click the color box to open the color pop-up window and set the glow color.
 - Drag the Width slider to set the width of the glow.
 - Drag the Opacity slider to set the percentage of transparency in the glow.
 - Drag the Softness slider to set the sharpness of the glow.
 - Drag the Offset slider to specify the distance of the glow from the object.
- 3 When you finish, click outside the window or press Enter to close it.

Applying filters and Photoshop plug-ins as Live Effects

You can apply all the built-in filters and plug-ins in the Filters menu as Live Effects using the Property inspector. Applying them as Live Effects ensures that you can edit or remove them from an object anytime.

Note: Photoshop 6 and 7 plug-ins are not compatible with Fireworks MX 2004.

Note: The menu known as the Xtras menu in some previous versions of Fireworks is called the Filters menu in Fireworks MX 2004. Fireworks Xtra extensions are now known as filters.

Plug-ins from the Filters menu

When you install a Photoshop plug-in in Fireworks, it is added to the Filters menu and to the Property inspector. You should use the Filters menu to apply filters and Photoshop plug-ins only when you are certain that you will not want to edit or remove the effect. You can remove a filter only if the Undo command is available.

Installing Photoshop plug-ins

You can use the Property inspector to apply some Photoshop plug-ins as Live Effects. Not all Photoshop plug-ins can be used as Live Effects. You can also import Photoshop plug-ins by pointing to a plug-ins folder using the Preferences dialog box. For more information, see [“Folders preferences” on page 283](#).

When you share a Fireworks file in which a Photoshop plug-in is applied as a Live Effect, whoever opens it can view the effect only on a computer in which the plug-in is installed. Built-in Fireworks effects, however, are saved with the Fireworks file.

To install Photoshop plug-ins:

- 1 Click the Add Effects button in the Property inspector, then choose Options > Locate Plugins.
- 2 Navigate to the folder where the Photoshop plug-ins are installed and click OK.
- 3 Restart Fireworks to load the plug-ins.

Note: If you move the plug-ins to a different folder, repeat the above steps, or choose File > Preferences and click the Folders tab to change the path to the plug-ins. Then restart Fireworks.

To apply a Photoshop plug-in to a selected object as a Live Effect:

- Click the Add Effects button in the Property inspector, then choose an effect from the Options submenu.

About applying effects to grouped objects

When you apply an effect to a group, the effect is applied to all objects in the group. If the objects are ungrouped, each object's effect settings revert to those applied to the object individually.

You can apply an effect to an individual object within a group by selecting only that object with the Subselection tool. For information on selecting a group or objects within a group, see [“Selecting objects within groups” on page 25](#).

Editing Live Effects

When you click a Live Effect's info button in the Property inspector, Fireworks opens a pop-up window with the current settings for the effect, which you can edit.

To edit a Live Effect:

- 1 In the Property inspector, click the info button next to the effect you want to edit.
The corresponding pop-up window or dialog box opens.

- 2 Adjust the effect settings.

Note: If an effect is not editable, the info button is dimmed. For example, you cannot edit Auto Levels.

- 3 Click outside the window or press Enter.

Reordering Live Effects

You can rearrange the order of the effects applied to an object. Reordering effects changes the sequence in which the effects are applied, which can change the combined effect.

In general, effects that change the interior of an object, such as the Inner Bevel effect, should be applied before effects that change the object's exterior. For example, you should apply the Inner Bevel effect before you apply the Outer Bevel, Glow, or Shadow effect.

To reorder effects applied to a selected object:

- Drag an effect to the desired position in the list in the Property inspector.

Note: Effects at the top of the list are applied before the effects at the bottom.

Removing Live Effects

You can easily remove individual effects or all effects from an object.

To remove a single effect applied to a selected object:

- Select the effect you want to remove from the Effects list in the Property inspector, then click the Delete Effects button.

To remove all effects from a selected object:

- Click the Add Effects button in the Property inspector, then choose None from the pop-up menu.

Creating custom Live Effects

You can save a particular combination of settings for Live Effects by creating a custom Live Effect. All custom Live Effects appear in the Add Effects pop-up menu in the Property inspector and in the Styles panel. Custom Live Effects are actually styles with all property options deselected except for the Effect option.

- You can create a custom Live Effect using the Property inspector or Styles panel.
- You can apply a custom Live Effect to selected objects from the Add Effects pop-up menu or the Styles panel.
- You can rename or delete a custom Live Effect using the Styles panel.

To create a custom Live Effect using the Property inspector:

- 1 Apply Live Effect settings to selected objects. For more information, see [“Applying Live Effects” on page 120](#).
- 2 Click the Add Effects button in the Property inspector, then choose Options > Save As Style. The Add Style dialog box opens.
- 3 Type a name for the style and click OK.

The custom Live Effect name is added to the Add Effects pop-up menu, and a style icon representing the Live Effect is added to the Styles panel.

To create a custom Live Effect using the Styles panel:

- 1 Apply Live Effect settings to selected objects. For more information, see [“Applying Live Effects” on page 120](#).
- 2 Choose Add Style from the Styles panel Options menu.
The Add Style dialog box opens.
- 3 Deselect all properties except the Effect property, enter a name, and click OK.
The custom Live Effect name is added to the Add Effects pop-up menu, and a style icon representing the Live Effect is added to the Styles panel.

Note: If you choose any additional properties in the Add Style dialog box, the style will no longer be an item on the Add Effects pop-up menu in the Property inspector, although it will remain on the Styles panel as a typical style.

To apply a custom Live Effect to selected objects, do one of the following:

- Click the Add Effects button in the Property inspector, then choose the custom Live Effect.
- Click the icon for the custom Live Effect in the Styles panel.

You can rename or delete a custom Live Effect as you would any other style in the Styles panel. For more information, see [“Creating and deleting styles” on page 156](#) and [“Editing styles” on page 157](#).

Note: You cannot rename or delete a standard Fireworks effect.

Saving Live Effects as commands

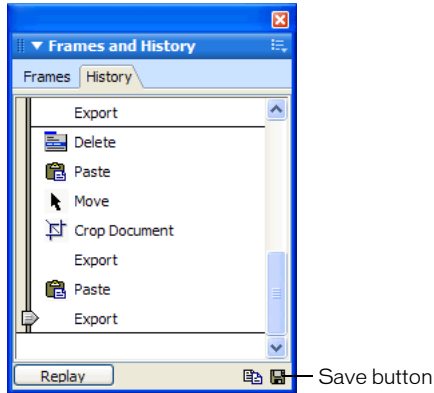
You can save and reuse an effect by creating a command based on it. Using the History panel, you can automate all the Live Effects applied to an object by creating a command available from the Commands menu. You can use these commands in batch processing. For more information, see [“Performing commands with a batch process” on page 272](#).

To save effect settings as a command:

- 1 Apply the effects to the object.
- 2 If the History panel is not visible, choose Window > History.
- 3 Shift-click the range of actions you want to save as a command.

4 Do one of the following:

- Choose Save as Command from the History panel Options menu.
- Click the Save button at the bottom of the History panel.



5 Enter a command name and click OK to add the command to the Commands menu.

CHAPTER 7

Layers, Masking, and Blending

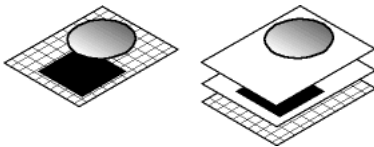
Layers divide a Macromedia Fireworks MX 2004 document into discrete planes, as though the components of the illustration were drawn on separate tracing paper overlays. A document can be made up of many layers, and each layer can contain many objects. In Fireworks, the Layers panel lists layers and the objects contained in each layer. Fireworks layers are similar to layer sets in Photoshop. Photoshop layers are similar to individual Fireworks objects.

Masking gives you creative control over layers and objects. You can apply masks and blending modes from the Layers panel. You can also create masks using options on the Select and Modify menus. You can use a vector object or a bitmap object to block out part of the underlying image. For example, if you want to block out part of a photograph so that it appears to have an elliptical frame around it, you can paste an elliptical shape as a mask on top of the photograph. All areas outside the ellipse disappear as if cropped, showing only the part of the picture inside the ellipse.

Blending techniques give you another level of creative control. You can create unique effects by blending the colors in overlapping objects. Fireworks has several blending modes to help you achieve the look you want.

Working with layers

Each object in a document resides on a layer. You can either create layers before you draw or add layers as needed. The canvas is below all layers and is not itself a layer. For more information, see Fireworks Help.



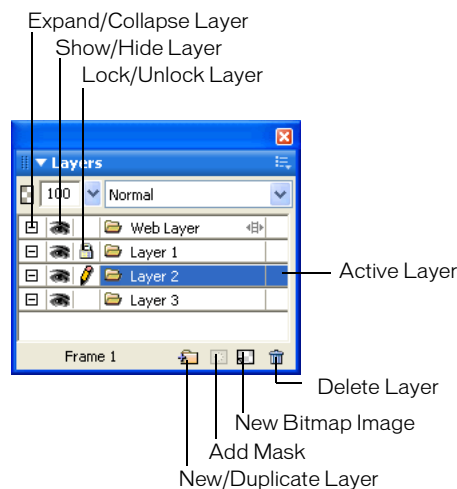
You can view the stacking order of layers and objects in the Layers panel. This is the order in which they appear in the document. Fireworks stacks layers based on the order in which you created them, placing the most recently created layer on the top of the stack. The stacking order determines how objects on one layer overlap objects on another. You can rearrange the order of layers and of objects within layers.

The Layers panel displays the current state of all layers in the current frame of a document. To view other frames, you can use the Frames panel or choose an option from the Frame pop-up menu at the bottom of the Layers panel. For more information, see [“Working with frames” on page 216](#).

The name of the active layer is highlighted in the Layers panel. You can expand a layer to view a list of all the objects on it. The objects are displayed in thumbnails.

Masks are also shown in the Layers panel. Selecting the mask thumbnail allows you to edit the mask. You can also create new bitmap masks using the Layers panel. For more information about masking, see [“Masking images” on page 134](#).

Opacity and blend mode controls are at the top of the Layers panel. For more information, see [“Adjusting opacity and applying blends” on page 154](#).



Activating layers

When you click a layer or an object on a layer, that layer becomes the active layer. Objects that you subsequently draw, paste, or import reside initially at the top of the active layer.

To activate a layer, do one of the following:

- Click the layer name in the Layers panel.
- Select an object on that layer.

Adding and removing layers

Using the Layers panel, you can add new layers, delete unwanted layers, and duplicate existing layers and objects.

When you create a new layer, a blank layer is inserted above the currently selected layer. The new layer becomes the active layer and is highlighted in the Layers panel. When you delete a layer, the layer above it becomes the active layer.

Creating a duplicate layer adds a new layer that contains the same objects as the currently selected one. Duplicated objects retain the opacity and blending mode of the objects from which they were copied. You can make changes to the duplicated objects without affecting the originals.

To add a layer, do one of the following:



- Click the New/Duplicate Layer button with no layer selected.
- Choose Edit > Insert > Layer.
- Choose New Layer from the Layers panel Options menu, and click OK.

To delete a layer, do one of the following:



- Drag the layer to the trash can icon in the Layers panel.
- Select the layer and click the trash can icon in the Layers panel.

To duplicate a layer, do one of the following:

- Drag a layer to the New/Duplicate Layer button.
- Select a layer and choose Duplicate Layer from the Layers panel Options menu. Then choose the number of duplicate layers to insert and where to place them in the stacking order:

At the Top places the new layer or layers at the top of the Layers panel. The Web Layer is always the top layer, so choosing At the Top places the duplicate layer below the Web Layer.

Before Current Layer places the new layer or layers above the selected layer.

After Current Layer places the new layer or layers below the selected layer.

At the Bottom places the new layer or layers at the bottom of the Layers panel.

To duplicate an object:

- Alt-drag (Windows) or Option-drag (Macintosh) the object to the desired location.

Viewing layers

The Layers panel displays objects and layers in a hierarchical structure. If a document contains many objects and layers, the Layers panel can become cluttered and difficult to navigate. Collapsing the display of layers helps eliminate clutter. When you need to view or select specific objects on a layer, you can expand that layer. You can also expand or collapse all layers at once.

To expand or collapse the objects on a layer:

- Click the Plus (+) or Minus (-) button (Windows) or the triangle (Macintosh) to the left of the layer name in the Layers panel.

To expand or collapse all layers:

- Alt-click the Plus (+) or Minus (-) button (Windows) or Option-click the triangle (Macintosh) to the left of the layer name in the Layers panel.

Organizing layers

You can organize layers and objects in a document by naming them and rearranging them in the Layers panel. Objects can be moved within a layer or between layers.

Moving layers and objects in the Layers panel changes the order in which objects appear on the canvas. Objects at the top of a layer appear above other objects in that layer on the canvas. Objects on the topmost layer appear in front of objects on lower layers.

Note: The Layers panel auto-scrolls when you drag a layer or object up or down beyond the bounds of the viewable area.

To name a layer or object:

- 1 Double-click a layer or object in the Layers panel.
- 2 Type a new name for the layer or object and press Enter.

Note: The Web Layer cannot be renamed. However, you can name web objects on the Web Layer, such as slices and hotspots. For more information, see [“Using the Web Layer” on page 134](#).

To move a layer or object:

- Drag the layer or object to the desired location in the Layers panel.

To move all selected objects on a layer to another location:

- Drag the layer’s blue selection indicator to another layer.
All selected objects on the layer move to the other layer simultaneously.

To copy all selected objects on a layer to another location:

- Alt-drag (Windows) or Option-drag (Macintosh) the layer’s blue selection indicator to another layer.
Fireworks copies all selected objects on the layer to the other layer.

Protecting layers and objects

The Layers panel offers a number of options that let you control the accessibility of objects.

You can protect objects in your document from inadvertent selection and editing. Locking a layer prevents objects on that layer from being selected or edited. The Single Layer Editing feature protects objects on all but the active layer from unwanted selection or changes. You can also use the Layers panel to control the visibility of objects and layers on the canvas. When an object or layer is hidden in the Layers panel, it does not appear on the canvas, so it cannot be inadvertently selected or edited.

Note: Hidden layers and objects are not included when you export your document. Objects on the Web Layer can always be exported, however, whether they are hidden or not. For more information about exporting, see [“Exporting from Fireworks” on page 247](#).

To lock a layer:

- Click the square in the column immediately to the left of the layer name.



A padlock icon indicates that the layer is locked.

Note: Although layers can be locked, individual objects cannot.

To lock multiple layers:

- Drag the pointer along the Lock column in the Layers panel.

To lock or unlock all layers:

- Choose Lock All or Unlock All from the Layers panel Options menu.

To turn on or off Single Layer Editing:

- Choose Single Layer Editing from the Layers panel Options menu.
A check mark indicates that Single Layer Editing is active.

To show or hide a layer or objects on a layer:

- Click the square in the middle column to the left of a layer or object name.



The eye icon indicates that a layer is visible.

To show or hide multiple layers or objects:

- Drag the pointer along the Eye column in the Layers panel.

To show or hide all layers and objects:

- Choose Show All or Hide All from the Layers panel Options menu.

Merging objects in the Layers panel

If you work with bitmap objects, you may find that the Layers panel easily becomes cluttered. You can merge objects in the Layers panel, if the bottommost selected object is immediately above a bitmap object. Objects and bitmaps to be merged do not have to be adjacent in the Layers panel or reside on the same layer.

Merging down causes all selected vector objects and bitmap objects to be flattened into the bitmap object that lies just beneath the bottommost selected object. The result is a single bitmap object. Vector objects and bitmap objects cannot be edited separately once merged, and editability for vector objects is lost.

To merge objects:

- 1 Select the object or objects on the Layers panel that you want to merge with a bitmap object. Shift-click to select more than one object.

Tip: You can merge the contents of a selected layer into a bitmap object that is the topmost object on the layer immediately beneath the selected layer.

- 2 Do one of the following:

- Choose Merge Down from the Layers panel Options menu.
- Choose Modify > Merge Down.
- Choose Merge Down from the context menu that appears when you right-click (Windows) or Control-click (Macintosh) the selected objects on the canvas.

The selected object or objects merge with the bitmap object. The result is a single bitmap object.

Note: Merge Down does not affect slices, hotspots, or buttons.

Sharing layers

You can share a layer across all frames in a document. This allows you to update an object on a layer and have that object be updated automatically in all frames. This is useful when you want objects such as background elements to appear on all frames of an animation.

To share a selected layer across frames, do one of the following:

- Choose Share This Layer from the Layers panel Options menu.
- Double-click the layer name in the Layers panel, and select Share Across Frames.

Using the Web Layer

The Web Layer is a special layer that appears as the top layer in each document. The Web Layer contains web objects, such as slices and hotspots, used for assigning interactivity to exported Fireworks documents. For more information on web objects, see [Chapter 9, “Slices, Rollovers, and Hotspots,”](#) on page 167.

You cannot unshare, delete, duplicate, move, or rename the Web Layer. You also cannot merge objects that reside on the Web Layer. It is always shared across all frames, and web objects are visible on every frame.

To rename a slice or hotspot in the Web Layer:

- 1 Double-click the slice or hotspot in the Layers panel.
- 2 Type the new name, and then click outside the window or press Enter.

Note: When you rename a slice, that name is used when the slice is exported.

About importing Photoshop grouped layers

Photoshop files that contain layers are imported with each layer placed as a separate object on a single Fireworks layer. Grouped layers are imported as individual layers, as if the layers were ungrouped in Photoshop before being imported into Fireworks. The clipping effect on Photoshop grouped layers is lost on import.

Masking images

As the name suggests, masks hide or show parts of an object or image. You can use several masking techniques to achieve many kinds of creative effects with objects.

You can create a mask that acts as a cookie cutter, cropping or clipping underlying objects or images. Or you can create a mask that gives the effect of a foggy window, revealing or hiding portions of the objects beneath it. This type of mask uses grayscale to make selected objects less visible or more so. Or you can create a mask that uses its own transparency to affect visibility.

You can create a mask using the Layers panel or the Edit, Select, or Modify menus. After you create a mask, you can adjust the position of the masked selection on the canvas or modify the appearance of a mask by editing the mask object. You can also apply transformations to the mask as a whole or to the components of a mask individually.

About masks

You can create a mask object from either a vector object (a vector mask) or a bitmap object (a bitmap mask). You can also use multiple objects or grouped objects to create a mask.

About vector masks

If you have used other vector-illustration applications such as Macromedia FreeHand, you may be familiar with vector masks, which are sometimes called clipping paths or paste insides. The vector mask object crops or clips the underlying objects to the shape of its path, creating a cookie-cutter effect.



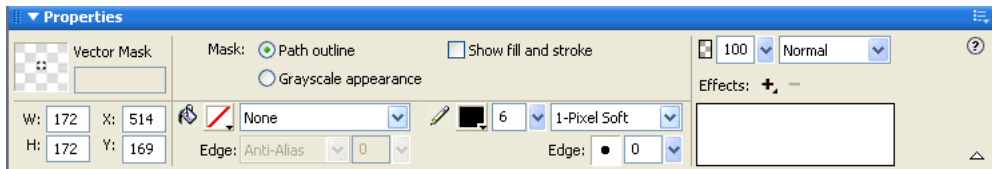
A vector mask applied using its path outline

When you create a vector mask, a mask thumbnail with a pen icon appears in the Layers panel to indicate you've created a vector mask.



A vector mask thumbnail in the Layers panel

When a vector mask is selected, the Property inspector displays information about how the mask is applied. The bottom half of the Property inspector displays additional properties that allow you to edit the mask object's stroke and fill.



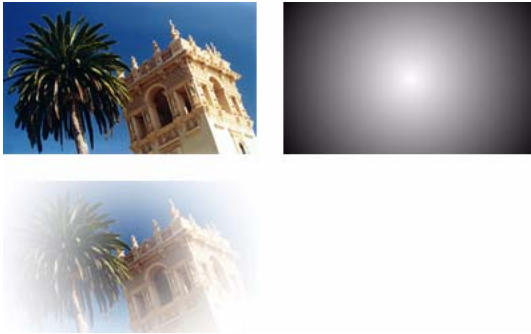
Vector mask properties in the Property inspector

By default, vector masks are applied using their path outline, but you can also apply them in other ways. For more information, see [“Changing the way masks are applied” on page 149](#).

Note: Vector masks created in Fireworks 4 that were applied using their grayscale appearance are imported as uneditable bitmap masks in Fireworks MX 2004.

About bitmap masks

If you're Photoshop user, you may be familiar with layer masks. Fireworks bitmap masks are similar to layer masks in that the pixels of a mask object affect the visibility of underlying objects. However, Fireworks bitmap masks are much more versatile: you can easily change how they are applied, whether using their grayscale appearance or their own transparency. In addition, the Fireworks Property inspector makes mask properties and bitmap tool options more readily available, greatly simplifying the mask-editing process. When a mask is selected, the Property inspector displays a variety of properties not only for a selected mask but also for any bitmap tools you might use to edit the mask.



Original objects and a bitmap mask applied using its grayscale appearance

You can apply bitmap masks in two ways:

- Using an existing object to mask other objects. This technique is similar to applying a vector mask.
- Creating what's known as an empty mask. Empty masks start out as either totally transparent or totally opaque. A transparent (or white) mask shows the masked object in its entirety, and an opaque (or black) mask hides the masked object completely. You can use the bitmap tools to draw on or modify the mask object, revealing or hiding the underlying masked objects.

When you create a bitmap mask, the Property inspector displays information about how the mask is applied. If you choose a bitmap tool when a bitmap mask is selected, the Property inspector displays the mask's properties and options for the selected tool, simplifying the mask-editing process.



Bitmap mask properties in the Property inspector when a bitmap tool is selected

By default, most bitmap masks are applied using their grayscale appearance, but you can also apply them using their alpha channel. For more information, see [“Changing the way masks are applied” on page 149](#).

Note: Fireworks MX and Fireworks MX 2004 grayscale masks behave more like masks in other graphics applications than masks in previous versions of Fireworks do. In grayscale masks created in Fireworks MX and Fireworks MX 2004, white always reveals masked objects, and black always hides masked objects. Compare this with Fireworks 4, where a black mask reveals underlying objects and a white mask hides underlying objects.

Creating a mask from an existing object

You can create a mask from an existing object. When used as a mask, a vector object’s path outline can be used to clip or crop other objects. When a bitmap object is used as a mask, either the brightness of its pixels or its transparency affects the visibility of other objects.

Masking objects using the Paste as Mask command

Using the Paste as Mask command, you can create masks by masking an object or group of objects with another object. Paste as Mask creates either a vector mask or a bitmap mask. When you use a vector object as the mask, Paste as Mask creates a vector mask that crops or clips masked objects using the path outline of the vector object. When you use a bitmap image as the mask, Paste as Mask creates a bitmap mask that affects the visibility of masked objects using the grayscale color values of the bitmap object.

To create a mask with the Paste as Mask command:

- 1 Select the object you want to use as the mask. Shift-click to select multiple objects.

Note: If you use multiple objects as the mask, Fireworks always creates a vector mask, even if both objects are bitmaps.

- 2 Position the selection so that it overlaps the object or group of objects to be masked.
The object or objects you want to use as the mask can be either in front of or behind the objects or group to be masked.



- 3 Choose Edit > Cut to cut the object or objects you want to use as the mask.

- 4 Select the object or group you want to mask.

If you are masking multiple objects, the objects must be grouped. For more information about grouping objects, see [“Grouping objects” on page 25](#).

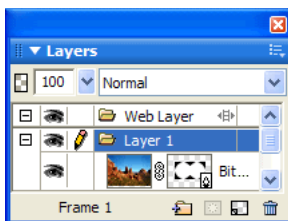


- 5 Do one of the following to paste the mask:

- Choose Edit > Paste as Mask.
- Choose Modify > Mask > Paste as Mask.



A mask applied to an image with a black canvas



The mask in the Layers panel

Masking objects using the Paste Inside command

If you are a Macromedia FreeHand user, you may be familiar with the Paste Inside method of creating masks. Paste Inside creates either a vector mask or a bitmap mask, depending on the type of mask object you use. The Paste Inside command creates a mask by filling a closed path or bitmap object with other objects: vector graphics, text, or bitmap images. The path itself is sometimes referred to as a clipping path, and the items it contains are called contents or paste insides. Contents extending beyond the clipping path are hidden.

The Paste Inside command in Fireworks produces a similar effect to the Paste as Mask command, with a couple of differences:

- With Paste Inside, the object you cut and paste is the object to be masked. Compare this with Paste as Mask, where the object you cut and paste is the mask object.
- With vector masks, Paste Inside shows the fill and stroke of the mask object itself. A vector mask object's fill and stroke are not visible by default with Paste as Mask. You can turn a vector mask's fill and stroke on or off, however, using the Property inspector. For more information, see [“Changing the way masks are applied” on page 149](#).

To create a mask using the Paste Inside command:

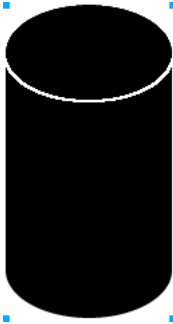
- 1 Select the object or objects to use as the paste inside contents.
- 2 Position the object or objects so that they overlap the object into which you want to paste the contents.

Note: Stacking order is not important, as long as the objects you want to use as the paste inside contents remain selected. These objects can be above or below the mask object in the Layers panel.



- 3 Choose Edit > Cut to move the objects to the Clipboard.

- 4 Select the object into which you want to paste the contents. This object will be used as the mask, or clipping path.



- 5 Choose Edit > Paste Inside.

The objects you pasted appear to be inside or clipped by the mask object.



Using text as a mask

Text masks are a type of vector mask. You apply text masks just as you apply masks using existing objects: you simply use text as the mask object. The usual way to apply a text mask is to use its path outline, but you can apply a text mask using its grayscale appearance as well.



A text mask applied using its path outline

For more information, see [“Creating a mask from an existing object” on page 137](#). For more information about the different ways masks can be applied, see [“Changing the way masks are applied” on page 149](#).

Masking objects using the Layers panel

The quickest way to add an empty, transparent bitmap mask is through the Layers panel. The Layers panel adds a white mask to an object, which you can customize by drawing on it with the bitmap tools.

Note: For details on creating empty, opaque (or black) masks, see [“Masking objects using the Reveal and Hide commands” on page 142](#).

To create a bitmap mask using the Layers panel:

- 1 Select the object you want to mask.
- 2 Click the Add Mask button at the bottom of the Layers panel.
Fireworks applies an empty mask to the selected object. The Layers panel displays a mask thumbnail representing the empty mask.
- 3 Optionally, if the masked object is a bitmap, use one of the marquee or lasso tools to create a pixel selection.
- 4 Choose a bitmap painting tool from the Tools panel, such as the Brush, Pencil, Paint Bucket, or Gradient tool.
- 5 Set the desired tool options in the Property inspector.
- 6 With the mask still selected, draw on the empty mask. In the areas where you draw, the underlying masked object is hidden.



Image with mask applied



The mask as it appears in the Layers panel

Note: For more information about modifying a bitmap mask's appearance by drawing on it, see [“Modifying a mask's appearance” on page 148](#).

Masking objects using the Reveal and Hide commands

The Modify > Mask submenu has several options for applying empty bitmap masks to objects:

Reveal All applies an empty, transparent mask to an object, revealing the entire object. To achieve the same effect, click the Add Mask button in the Layers panel.

Hide All applies an empty, opaque mask to an object, which hides the entire object.

Reveal Selection can be used only with pixel selections. It applies a transparent pixel mask using the current pixel selection. The other pixels in the bitmap object are hidden. To achieve the same effect, make a pixel selection, then click the Add Mask button.

Hide Selection can be used only with pixel selections. It applies an opaque pixel mask using the current pixel selection. The other pixels in the bitmap object are shown. To achieve the same effect, make a pixel selection, then Alt-click (Windows) or Option-click (Macintosh) the Add Mask button.

To use the Reveal All and Hide All commands to create a mask:

- 1 Select the object you want to mask.
- 2 Do one of the following to create the mask:
 - Choose Modify > Mask > Reveal All to show the object.
 - Choose Modify > Mask > Hide All to hide the object.
- 3 Choose a bitmap painting tool from the Tools panel, such as the Brush, Pencil, or Paint Bucket.
- 4 Set the desired tool options in the Property inspector.

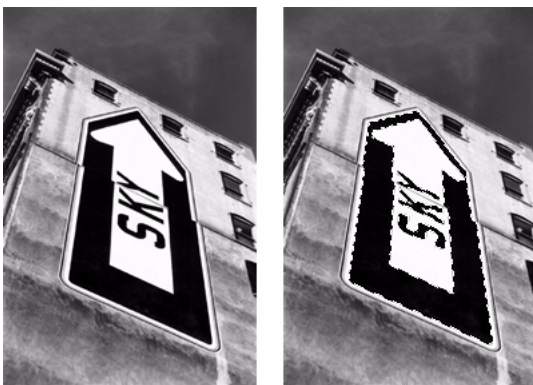
If you've applied a Hide All mask, you must choose a color other than black.

- 5 Draw on the empty mask. In the areas where you draw, the underlying masked object is either hidden or shown, depending on the type of mask you applied.

Note: For more information about modifying a bitmap mask's appearance by drawing on it, see ["Modifying a mask's appearance" on page 148](#).

To use Reveal Selection and Hide Selection commands to create a mask:

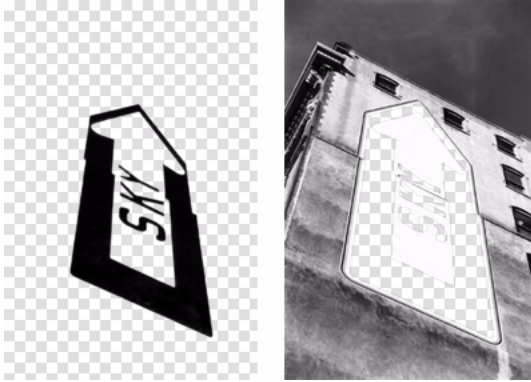
- 1 Choose the Magic Wand or any marquee or lasso tool from the Tools panel.
- 2 Select pixels in a bitmap.



Original image; pixels selected with the Magic Wand

3 Do one of the following to create the mask:

- Choose Modify > Mask > Reveal Selection to show the area defined by the pixel selection.
- Choose Modify > Mask > Hide Selection to hide the area defined by the pixel selection.



The results of Reveal Selection and Hide Selection

A bitmap mask is applied using the pixel selection. You can further edit the mask to reveal or hide the remaining pixels of the masked object using the bitmap tools in the Tools panel. For more information about modifying a bitmap mask's appearance by drawing on it, see [“Modifying a mask's appearance” on page 148](#).

About importing and exporting Photoshop layer masks

In Photoshop, you can mask images using layer masks or grouped layers. Fireworks lets you successfully import images that employ layer masks without losing the ability to edit them. Layer masks are imported as bitmap masks.

Fireworks masks can also be exported to Photoshop. They are converted into Photoshop layer masks. If the masked objects include text and you want to maintain text editability in Photoshop, you must choose Maintain Editability over Appearance when exporting.

Note: If text is used as the mask object, it is converted to a bitmap and is no longer editable as text after it is imported into Photoshop.

Grouping objects to form a mask

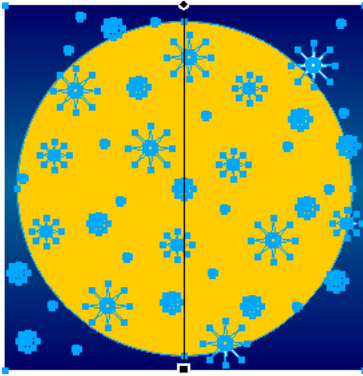
You can group two or more objects to create a mask. The topmost object becomes the mask object.

You can group objects as either bitmap masks or vector masks. The stacking order determines the type of mask applied. If the top object is a vector object, the result is a vector mask. If the top object is a bitmap object, the result is a bitmap mask.

Note: For more information about vector and bitmap masks, see [“About masks” on page 134](#).

To group objects to form a mask:

- 1 Shift-click two or more overlapping objects.



You can select objects from different layers.

- 2 Choose Modify > Mask > Group as Mask.



Editing masks

You can modify masks in many ways. By modifying a mask's position, shape, and color, you can change the visibility of masked objects. You can also change a mask's type and the way it is applied. In addition, masks can be replaced, disabled, or deleted.

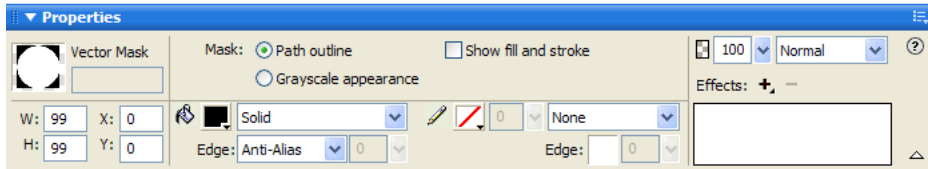
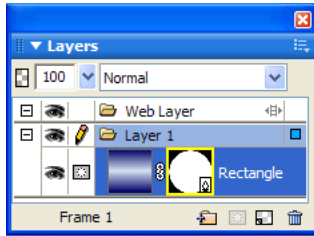
The results of editing a mask are immediately visible, even if the mask object itself is not visible on the canvas. The mask thumbnail in the Layers panel displays the edits you make to the mask.

Masked objects can also be modified. You can rearrange masked objects without moving the mask. You can also add additional masked objects to an existing mask group.

Selecting masks and masked objects using mask thumbnails

Masks and masked objects can be easily identified and selected using the thumbnails in the Layers panel. Thumbnails allow you to easily select and edit just the mask or the masked objects, without affecting the other objects.

When you select the mask thumbnail, the mask icon appears beside it in the Layers panel, and the mask's properties show in the Property inspector, where they can be changed if desired.



To select a mask:

- Click the mask thumbnail in the Layers panel.
The Layers panel displays a yellow highlight around a mask thumbnail when it is selected.

To select masked objects:

- Click the masked object thumbnail in the Layers panel.
The Layers panel displays a blue highlight around a masked object's thumbnail when it is selected.

Selecting masks and masked objects using the Subselection tool

You can use the Subselection tool to select individual masks and masked objects on the canvas without selecting the other components of the mask.

When you select a mask or a masked object with the Subselection tool, the Property inspector shows the properties for the selected object.

To select a mask or masked object independently:

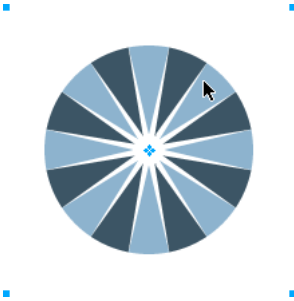
- Click the object on the canvas with the Subselection tool.
When selected, masks have a yellow highlight and masked objects have a blue highlight.

Moving masks and masked objects

You can reposition masks and masked objects. They can be moved together or independently.

To move a mask and its masked objects together:

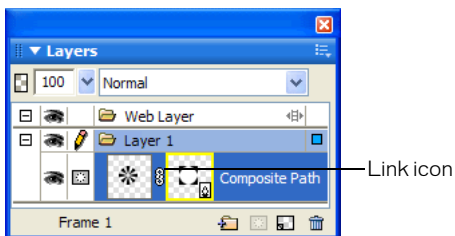
- 1 Select the mask on the canvas using the Pointer tool.
- 2 Drag the mask to a new location, but don't drag the move handle unless you want to move the masked object separately from the mask.



To move masks and masked objects independently by unlinking:

- 1 Click the link icon on the mask in the Layers panel.

This unlinks masks from masked objects so that they can be moved independently.



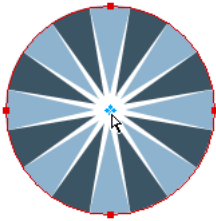
- 2 Select the thumbnail of the object you want to move: the mask or the masked objects.
- 3 Drag the object or objects on the canvas with the Pointer tool.

Note: If there is more than one masked object, all masked objects move together.

- 4 Click between the mask thumbnails in the Layers panel. This relinks the masked objects to the mask.

To move a mask independently using its move handle:

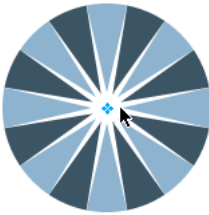
- 1 Select the mask on the canvas using the Pointer tool.
- 2 Choose the Subselection tool and drag the mask's move handle to a new location.



To move masked objects independently of the mask using the move handle:

- 1 Select the mask on the canvas using the Pointer tool.
- 2 Drag the move handle to a new location.

The objects move without affecting the position of the mask.



Note: If there is more than one masked object, all masked objects move together.

To move masked objects independently of each other:

- Click the object with the Subselection tool to select it, then drag the object.
This is the only way to select and move an individual masked object without moving other masked objects.

Modifying a mask's appearance

By modifying a mask's shape and color, you can change the visibility of masked objects.

You change the shape of a bitmap mask by drawing on it with the bitmap tools. You change the shape of a vector mask by moving the mask object's points.

If a mask is applied using its grayscale appearance, you can modify its colors to affect the opacity of the underlying masked objects. Using midtone colors on a grayscale mask gives masked objects a translucent appearance. Use lighter colors to display the masked objects, and darker colors to hide masked objects and show the background.

You can also alter a mask by adding mask objects to it or using the transformation tools.

To modify a selected mask's shape, do one of the following:

- Draw on a bitmap mask with any of the bitmap drawing tools.
- Move the points of a vector mask object with the Subselection tool.

To modify a selected mask's color, do one of the following:

- For grayscale bitmap masks, use the bitmap tools to draw on the mask using various grayscale color values.
- For grayscale vector masks, change the color of the mask object.

Note: Use lighter colors to display the masked objects and darker colors to hide the masked objects.

To modify a mask by adding more mask objects:

- 1 Choose Edit > Cut to cut the selected object or objects you want to add.
- 2 Select the thumbnail of the masked object in the Layers panel.
- 3 Choose Edit > Paste as Mask.
- 4 Choose Add when asked whether to replace the existing mask or add to it.

The object or objects are added to the mask.

To modify a mask using the transformation tools:

- 1 Select the mask on the canvas using the Pointer tool.
- 2 Use a transformation tool or a command from the Modify > Transform submenu to apply a transformation to the mask. For more information about using the transformation tools, see [“Transforming and distorting selected objects and selections” on page 21](#).

The transformation is applied to the mask and its masked objects.

Note: You can apply a transformation to the mask object alone by first unlinking the mask from the mask objects in the Layers panel and then performing the transformation.

Changing the way masks are applied

You can use the Property inspector to ensure that you are editing a mask and to identify the type of mask you are working on. When a mask is selected, the Property inspector lets you change the way the mask is applied. If the Property inspector is minimized, click the expander arrow to see all properties.

Vector masks are applied using their path outline by default. The outline of the path or text is used as the mask. Optionally, you can show the mask's fill and stroke. This produces the same result as using Paste Inside to create masks. For more information, see [“Creating a mask from an existing object” on page 137](#).



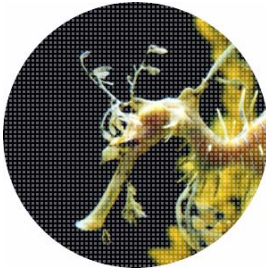
A vector mask applied using its path outline with Show Fill and Stroke enabled

By applying a bitmap mask using its alpha channel, you can create a mask that looks similar to a vector mask applied using its path outline. When you apply a mask using its alpha channel, the transparency of the mask object affects the visibility of the object being masked.



A bitmap mask applied using its alpha channel

Both vector and bitmap masks can be applied using their grayscale appearance. Bitmap masks are applied using their grayscale appearance by default. When a mask is applied using its grayscale appearance, the lightness of its pixels determines how much of the masked object is displayed. Light pixels display the masked object. Darker pixels in the mask knock out the image and show the background. Applying masks using their grayscale appearance creates interesting effects if the mask object contains a pattern or gradient fill.



A vector mask with a pattern fill applied using its grayscale appearance

You can also convert vector masks into bitmap masks. Bitmap masks cannot be converted into vector masks, however.

For more information about vector and bitmap masks, see [“About masks” on page 134](#).

To apply a vector mask using its path outline:

- Choose Path Outline in the Property inspector when a vector mask is selected.

To show a vector mask’s fill and stroke:

- Choose Show Fill and Stroke in the Property inspector when a vector mask that has been applied using its path outline is selected.

To apply a bitmap mask using its alpha channel:

- Choose Alpha Channel in the Property inspector when a bitmap mask is selected.

To apply a vector or bitmap mask using its grayscale appearance:

- Choose Grayscale Appearance in the Property inspector when a mask is selected.

To convert a vector mask to a bitmap mask:

- 1 In the Layers panel, select the thumbnail of the mask object.
- 2 Choose Modify > Flatten Selection.

Adding objects to a masked selection

You can add more objects to an existing masked selection.

To add masked objects to a masked selection:

- 1 Choose Edit > Cut to cut the selected object or objects you want to add.
- 2 Select the thumbnail of the masked object in the Layers panel.
- 3 Choose Edit > Paste Inside.

The object or objects are added to the masked objects.

Note: Using the Paste Inside command on an existing mask won't show the mask object's stroke and fill unless the original mask was applied using its stroke and fill.

Replacing, disabling, and deleting masks

You can replace a mask with a new mask object. You can also disable or delete a mask. Disabling a mask temporarily hides it. Deleting a mask permanently removes it.

To replace a mask:

- 1 Choose Edit > Cut to cut the selected object or objects you want to use as the mask.
- 2 Select the thumbnail of the masked object in the Layers panel and choose Edit > Paste as Mask.
- 3 Click Replace when asked whether to replace the existing mask or add to it.

The existing mask object is replaced with the new one.

To disable or enable a selected mask, do one of the following:

- Choose Disable Mask or Enable Mask from the Layers panel Options menu.
- Choose Modify > Mask > Disable Mask or Modify > Mask > Enable Mask.

A red X appears on the mask thumbnail when it is disabled. Clicking the X enables the mask.

To delete a selected mask:

- 1 Do one of the following to delete the mask:
 - Choose Delete Mask from the Layers panel Options menu.
 - Choose Modify > Mask > Delete Mask.
 - Drag the mask thumbnail to the trash can icon in the Layers panel.
- 2 Choose whether you want to apply or discard the effect of the mask on the masked objects before deleting the mask:

Apply keeps the changes you have made to the object, but the mask is no longer editable. If the object being masked is a vector object, the mask and vector object are converted into a single bitmap image.

Discard gets rid of the changes you have made and restores the object to its original form.

Cancel stops the delete operation and leaves the mask intact.

Blending and transparency

Compositing is the process of varying the transparency or color interaction of two or more overlapping objects. In Fireworks, blending modes allow you to create composite images. Blending modes also add a dimension of control to the opacity of objects and images.

About blending modes

When you choose a blending mode, Fireworks applies it to the selected objects in their entirety. Objects in a single document or on a single layer can have blending modes that differ from those of other objects in the document or on the layer.

When objects with different blending modes are grouped, the group's blending mode overrides individual blending modes. Ungrouping the objects restores each object's individual blending mode.

A blending mode contains these elements:

Blend color is the color to which the blending mode is applied.

Opacity is the degree of transparency to which the blending mode is applied.

Base color is the color of pixels underneath the blend color.

Result color is the result of the blending mode's effect on the base color.

These are the blend modes in Fireworks:

Normal applies no blending mode.

Multiply multiplies the base color by the blend color, resulting in darker colors.

Screen multiplies the inverse of the blend color by the base color, resulting in a bleaching effect.

Darken selects the darker of the blend color and base color to use as the result color. This replaces only pixels that are lighter than the blend color.

Lighten selects the lighter of the blend color and base color to use as the result color. This replaces only pixels that are darker than the blend color.

Difference subtracts the blend color from the base color or the base color from the blend color. The color with less brightness is subtracted from the color with more brightness.

Hue combines the hue value of the blend color with the luminance and saturation of the base color to create the result color.

Saturation combines the saturation of the blend color with the luminance and hue of the base color to create the result color.

Color combines the hue and saturation of the blend color with the luminance of the base color to create the result color, preserving the gray levels for coloring monochrome images and tinting color images.

Luminosity combines the luminance of the blend color with the hue and saturation of the base color.

Invert inverts the base color.

Tint adds gray to the base color.

Erase removes all base color pixels, including those in the background image.

Blending mode examples



Original image



Normal



Multiply



Screen



Darken



Lighten



Difference



Hue



Saturation



Color



Luminosity



Invert



Tint



Erase

Adjusting opacity and applying blends

You can use the Property inspector or the Layers panel to adjust the opacity of selected objects and to apply blending modes. An Opacity setting of 100 renders an object completely opaque. A setting of 0 (zero) renders an object completely transparent.

You can also specify a blending mode and opacity before you draw an object.

To specify a blending mode and opacity before you draw an object:

- With the desired tool selected in the Tools panel, set blend and opacity options in the Property inspector before you draw the object.

Note: Blend and opacity options are not available for all tools.

To set a blending mode and opacity level for existing objects:

- 1 With two objects overlapping, select the top object.
- 2 Choose a blending option from the Blend Mode pop-up menu in the Property inspector or the Layers panel.
- 3 Choose a setting from the Opacity pop-up slider or type a value in the text box.

To set a default blending mode and opacity level to be applied to objects as you draw them:

- 1 Choose Select > Deselect to avoid inadvertently applying a blending mode and opacity.
- 2 With a vector or bitmap drawing tool selected, choose a blending mode and opacity level in the Property inspector.

The blending mode and opacity level you choose are used as the default for any objects you subsequently draw with that tool.

About the Fill Color Live Effect

Fireworks also offers a Live Effect that allows you to adjust the color of an object by altering the object's opacity and blend mode. This Live Effect, called Fill Color, produces the same effect as overlapping an object with one that has a different opacity and blend mode. For more details on using the Fill Color Live Effect, see [Chapter 6, “Using Live Effects,” on page 119](#).

CHAPTER 8

Using Styles, Symbols, and URLs

Macromedia Fireworks MX 2004 provides three panels in which you can store and reuse styles, symbols, and URLs. Styles are stored in the Styles panel, symbols are stored in the Library panel, and URLs are stored in the URL panel. By default, all three panels are organized in the Assets panel group.

The Styles panel contains a set of predefined Fireworks styles to choose from. In addition, if you have created a combination of strokes, fills, effects, and text attributes and want to reuse it, you can save the attributes as a style. Rather than rebuilding attributes each time, you can simply save them in the Styles panel and then apply that combination of attributes to other objects.

Fireworks has three types of symbols: graphic, animation, and button. Each has unique characteristics for its specific use. You can create new symbols, as well as duplicate, import, and edit symbols, using the Library panel. For information on specific features built into the animation and button symbols, see [Chapter 11, “Creating Animation,” on page 211](#) and [Chapter 10, “Creating Buttons and Pop-up Menus,” on page 191](#).

A URL, or Uniform Resource Locator, is an address of a specific page or file on the Internet. If you are using the same URL many times, you can add it to the URL panel. You can organize and group your URLs in URL libraries.

Using styles

You can save and reapply a set of predefined fill, stroke, effect, and text attributes by creating a style. When you apply a style to an object, that object takes on the style's characteristics.

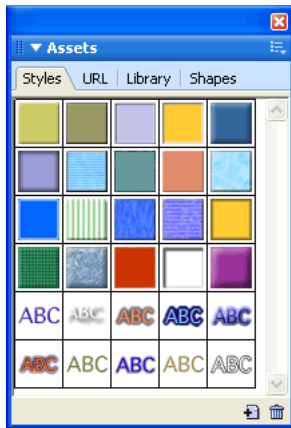


Fireworks has many predefined styles. You can add, change, and remove styles. The Fireworks CD-ROM and the Macromedia web site have many more predefined styles that you can import into Fireworks. You can also export styles and share them with other Fireworks users or import styles from other Fireworks documents.

Note: You cannot apply styles to bitmap objects.

Applying a style

You can use the Styles panel to create, store, and apply styles to objects or text.



Styles panel

When you apply a style to an object, you can later update the style without affecting the original object. Fireworks does not keep track of which style you applied to an object. If you delete a custom style, you cannot recover it; however, any object currently using the style retains its attributes. If you delete a style supplied in Fireworks, you can recover it and all other deleted styles using the Reset Styles command in the Styles panel Options menu. However, resetting styles also deletes your custom styles.

To apply a style to a selected object or text block:

- 1 Choose Window > Styles to open the Styles panel.
- 2 Click a style in the Styles panel.

Creating and deleting styles

You can create a style based on the attributes of a selected object. The style is displayed in the Styles panel.

You can also delete styles from the Styles panel.

The following attributes can be saved in a style:

- Fill type and color, including patterns, textures, and vector gradient attributes such as angle, position, and opacity
- Stroke type and color
- Effects
- Text attributes such as font, point size, style (bold, italic, or underline), alignment, anti-aliasing, auto-kerning, horizontal scale, range kerning, and leading

To create a new style:

- 1 Create or select a vector object or text with the stroke, fill, effect, or text attributes you want.
- 2 Click the New Style button at the bottom of the Styles panel.
- 3 Choose the attributes you want to be part of the style from the New Style dialog box.



Note: To save other text attributes not listed, such as alignment, anti-aliasing, auto-kerning, horizontal scale, range kerning, and leading, choose the Text Other option.

- 4 Name the style if you wish, and click OK.
An icon depicting the style appears in the Styles panel.

To base a new style on an existing style:

- 1 Apply the existing style to a selected object.
- 2 Edit the attributes of the object.
- 3 Save the attributes by creating a new style, as described in the previous procedure.

To delete a style:

- 1 Select a style from the Styles panel.
Shift-click to select multiple styles; Control-click (Windows) or Command-click (Macintosh) to select multiple noncontiguous styles.
- 2 Click the Delete Style button in the Styles panel.



Editing styles

If you want to change the attributes that a style contains, you can edit the style from the Styles panel.

To edit a style:

- 1 Choose Select > Deselect to deselect any objects on the canvas.
- 2 Double-click a style in the Styles panel.
- 3 In the Edit Style dialog box, choose or deselect components of the attributes you wish to apply. The Edit Style dialog box contains the same options as the New Style dialog box. For details on choosing attributes to include in a style, see [“Creating and deleting styles” on page 156](#).
- 4 Click OK to apply the changes to the style.

Exporting and importing styles

You may want to share styles with other Fireworks users to save time and maintain consistency. You can share styles by exporting them for use on other computers.

To export styles:

- 1 Select a style from the Styles panel.
Shift-click to select multiple styles; Control-click (Windows) or Command-click (Macintosh) to select multiple noncontiguous styles.
- 2 Choose Export Styles from the Styles panel Options menu.
- 3 Enter a name and location for the document that will contain the saved styles.
- 4 Click Save.

To import styles:

- 1 Choose Import Styles from the Styles panel Options menu.
- 2 Choose a styles document to import.

All styles in the styles document are imported and placed directly after the selected style in the Styles panel.

Using style defaults

If you want to delete all custom styles from the Styles panel and restore any deleted default styles, you can reset the Styles panel to its default state. You can also change the size of the icons displayed in the Styles panel.

To reset the Styles panel to the default styles:

- Choose Reset Styles from the Styles panel Options menu.

Note: Resetting styles to the default removes any custom styles you may have saved.

To change the size of the style preview icons:

- Choose Large Icons from the Styles panel Options menu to switch between large and small preview sizes.

Applying attributes without creating a style

You can copy attributes from one object and apply them to other objects, without creating a new style in the Styles panel. You can use this method to quickly apply attributes to an object when you are not planning to reapply those attributes to other objects. Attributes that can be copied and applied include fills, strokes, effects, and text attributes.

To copy attributes from one object and apply them to other objects:

- 1 Select the object whose attributes you want to copy.
- 2 Choose Edit > Copy.
- 3 Deselect the original object, then select the object or objects to which you want to apply the new attributes.
- 4 Choose Edit > Paste Attributes.

The selected objects take on the same attributes as the original object.

Using symbols

Fireworks has three types of symbols: graphic, animation, and button. Each has unique characteristics for its specific use. Instances are representations of a Fireworks symbol. When the symbol object (the original) is edited, the instances (copies) automatically change to reflect the modifications to the symbol.

Symbols are useful whenever you want to reuse a graphic element. You can place instances in multiple Fireworks documents and retain the association with the symbol. Symbols are helpful for creating buttons and animating objects across multiple frames. For more information about the additional features built into animation and button features, see [“Creating animation symbols” on page 212](#) and [“Creating button symbols” on page 191](#).

Creating a symbol

You can create graphic, animation, and button symbols using the Edit > Insert submenu. You can create a symbol from any object, text block, or group, and then organize them in the Library panel. To place instances in a document, you simply drag them from the Library panel onto the canvas.

To create a new symbol from a selected object:

- 1 Select the object and choose Modify > Symbol > Convert to Symbol.
- 2 Type a name for the symbol in the Name text box of the Symbol Properties dialog box.
- 3 Choose a symbol type: Graphic, Animation, or Button. Then click OK.

The symbol appears in the library, the selected object becomes an instance of the symbol, and the Property inspector displays symbol options.

To create a symbol from scratch:

- 1 Do one of the following:
 - Choose Edit > Insert > New Symbol.
 - Choose New Symbol from the Library panel Options menu.
- 2 Choose a symbol type: Graphic, Animation, or Button. Then click OK.

Depending on which symbol type you choose, the Symbol Editor or Button Editor opens.
- 3 Create the symbol using the tools in the Tools panel, then close the editor.

For more information, see [“Creating button symbols” on page 191](#) and [“Creating animation symbols” on page 212](#).

Placing instances

You can place instances of a symbol in the current document.

To place an instance:

- Drag a symbol from the Library panel to the current document.



An instance of a symbol on the canvas

Editing symbols

You can modify a symbol in the Symbol Editor, which automatically updates all associated instances when you finish editing.

Note: For most types of edits, modifying an instance affects the symbol and all other instances. There are some exceptions, however. For more information, see [“Editing instances” on page 160](#).

To edit a symbol and all its instances:

- 1 Do one of the following to open the Symbol Editor:
 - Double-click an instance.
 - Select an instance and choose **Modify > Symbol > Edit Symbol**.
- 2 Make changes to the symbol and close the window.
The symbol and all instances reflect the modifications.

To rename a symbol:

- 1 Double-click the symbol name in the Library panel.
- 2 Change the name in the Symbol Properties dialog box and click OK.

To duplicate a symbol:

- 1 In the Library panel, select the symbol.
- 2 Choose **Duplicate** from the Library panel Options menu.

To change a symbol's type:

- 1 Double-click the symbol name in the Library.
- 2 Choose a different Symbol Type option.

To select all unused symbols in the Library panel:

- Choose **Select Unused Items** from the Library panel Options menu.

To delete a symbol:

- 1 In the Library panel, select the symbol.
- 2 Choose **Delete** from the Library panel Options menu.
- 3 Click **Delete**. The symbol and all its instances are deleted.

Editing instances

When you double-click an instance to edit it, you're actually editing the symbol itself in the Symbol Editor or Button Editor. To edit only the current instance, you need to break the link between the instance and the symbol. This permanently breaks the relationship between the two, however, and any future edits you make to the symbol won't be reflected in the former instance.

Button symbols have several convenient features that allow you to retain the symbol-instance relationship for a group of buttons, while assigning unique button text and URLs to each instance. For more information, see [“Editing button symbols” on page 196](#).

Breaking symbol links

You can modify an instance without affecting the symbol or other instances by first breaking the link between it and the symbol.

To release an instance from a symbol:

- 1 Select the instance.
- 2 Choose **Modify > Symbol > Break Apart**.

The selected instance becomes a group. The symbol in the Library panel is no longer associated with that group. After separation from the symbol, a former button instance loses its button symbol characteristics and a former animation instance loses its animation symbol characteristics.

Editing instance properties

These instance properties can be modified in the Property inspector without affecting the symbol or other instances:

- Blending mode
- Opacity
- Effects
- Width and height
- *x* and *y* coordinates

Note: Button instances have additional properties that can be edited without affecting the symbol. For more information about editing button instances, see [“Editing button symbols” on page 196](#).

To edit instance properties without affecting the symbol or breaking the symbol link:

- 1 Select the instance.
- 2 Modify instance properties in the Property inspector.

Importing and exporting symbols

The Library panel stores animation, graphic, and button symbols that you create in the current document. It also stores symbols that you import into the current document. The Library panel is specific to the current document, but you can use the symbols from one library in more than one Fireworks document by importing and exporting, cutting and pasting, or dragging and dropping.

You can import symbols from other libraries, including libraries containing symbols prepared in Macromedia Fireworks and libraries containing symbols that you or someone else previously exported. Conversely, if you have created symbols that you would like to reuse or share, you can export your own symbol libraries. When you export a symbol library, it is exported as a PNG file.

Importing symbols

Fireworks has symbol libraries in the Edit > Libraries submenu from which you can import prepared animation symbols, graphic symbols, and button symbols, as well as navigation bars and multisymbol themes. Using these symbols, you can quickly create a sophisticated web page containing advanced navigation elements without having to spend time creating original symbols.

To import one or more prepared symbols from a Fireworks symbol library:

- 1 Open a Fireworks document.
- 2 Choose Edit > Libraries and choose a library:

Animations opens a collection of animated symbols.

Bullets opens a collection of graphic symbols resembling various list bullets.

Buttons opens a collection of 2-, 3-, and 4-state Fireworks button symbols.

Themes opens a list of animation, graphic, and button symbols; each theme consists of a similarly designed and similarly named trio of symbols that are color-coordinated to be used together.

Other opens an Open dialog box from which you can navigate to previously exported symbol library PNG files. For more information, see the next procedure.

In addition, you can import symbols from previously exported library PNG files located on your hard disk, on a CD, or on a network. For more information about exporting symbols, see [“Exporting symbols” on page 163](#).

To import symbols from another file into the current document:

- 1 Do one of the following:
 - Choose Import Symbols from the Library panel Options menu.
 - Choose Edit > Libraries > Other.
- 2 Navigate to the folder containing the file, choose the file, and click Open.
- 3 Select the symbols to import and click Import.

The imported symbols appear in the Library panel.



You can also import and export individual symbols into and out of the Library panels of multiple documents by dragging and dropping or copying and pasting instances.

To import a symbol by dragging and dropping or copying and pasting, do one of the following:

- Drag a symbol instance from the document containing the symbol into the destination document.
- Copy a symbol instance in the document containing the symbol, then paste it into the destination document.

The symbol is imported into the Library panel of the destination document and retains a relationship to the symbol in the original document. For more information, see [“Updating exported symbols and instances in multiple documents” on page 163](#).

Exporting symbols

If you have created or imported symbols in a Fireworks document and want to save them to reuse in other documents or share with others, you can use the Library panel Options menu to export them in a PNG file. You can then import the symbols by navigating to the PNG file that contains the symbols using the Edit > Libraries submenu. For more information, see [“Importing symbols” on page 162](#).

To export symbols:

- 1 Choose Export Symbols from the Library panel Options menu.
- 2 Select the symbols to export, and click Export.
- 3 Navigate to a folder, type a name for the symbol file, and click Save.

Fireworks saves the symbols in a single PNG file.

Updating exported symbols and instances in multiple documents

Imported symbols maintain their link to their original symbol document. You can edit the original symbol document, and then update the target documents to reflect the edits.

To update all exported symbols and instances:

- 1 In the original document, double-click an instance or select an instance and choose Modify > Symbol > Edit Symbol to open the appropriate symbol editor.
- 2 Modify the symbol, and close the editor.
- 3 Save the file.
- 4 In the document into which the symbol was imported, select the symbol in the Library panel.
- 5 Choose Update from the Library panel Options menu.

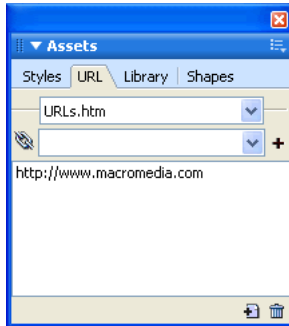
Note: To update all imported symbols, select all the symbols in the Library panel and choose Update.

Working with URLs

Assigning a URL to a web object creates a link to a file such as a web page. You can assign URLs to hotspots, buttons, and slice objects. When you intend to use the same URLs several times, you can create a URL library in the URL panel and store the URLs in the library. You use the URL panel to add, edit, and organize your URLs.

For example, if your website contains several navigation buttons to return to your home page, you can add the URL for your home page to the URL panel. Then you assign this URL to each navigation button by selecting it in the URL library. You can use the Find and Replace feature to change a URL across multiple documents (see [“Finding and replacing” on page 264](#)).

URL libraries are available for all Fireworks documents and are saved between sessions.



URL panel

Assigning a URL to a web object

To assign a URL to a web object:

- 1 Enter the URL in the Link text box.
- 2 Click the Plus (+) button to add the URL.
- 3 Select a web object.
- 4 Select the URL from the URL preview pane.

Creating a URL library

You can group URLs in libraries. This keeps related URLs together, making them easier to access. You can save URLs in the default URL library, URLs.htm, or in new URL libraries that you create. You can also import an existing HTML document's URLs and then create a library of them.

URLs.htm and any new libraries you create are stored in the URL Libraries folder in the Macromedia/Fireworks MX 2004 folder in your user-specific Application Data (Windows) or Application Support (Macintosh) folder. For information on locating this folder, see [“Working with configuration files” on page 286](#).

To create a new URL library:

- 1 Choose New URL Library from the URL panel Options menu.
- 2 Enter the library name in the text box and click OK.

The new library name appears in the Library pop-up menu in the URL panel.

To add a new URL to a URL library:

- 1 Choose a library from the Library pop-up menu.
- 2 Enter a URL in the Link text box.
- 3 Click the Plus (+) button.

The Plus (+) button adds the current URL to the library.

You can further organize your URLs by adding only those that are in use in your document.

To simultaneously add a URL to the library while assigning it to a web object:

- 1 Select the object.
- 2 Do one of the following to enter the URL:
 - Choose Add URL from the URL panel Options menu, enter an absolute or relative URL, and click OK.
 - Enter a URL in the Link text box. Click the Plus (+) button.

The URL appears in the URL preview pane. See [“Assigning URLs” on page 180](#) and [“Setting the URL for a button symbol or instance” on page 198](#).

To add used URLs to a URL library:

- 1 Choose a library from the Library pop-up menu.
- 2 Choose Add Used URLs to Library from the URL panel Options menu.

To delete a selected URL from the URL preview panel:

- Click the Delete URL from Library button at the bottom of the URL panel.

To delete all unused URLs from the library:

- 1 Choose Clear Unused URLs from the URL panel Options menu.
- 2 Click OK.

Editing URLs

You can easily edit URLs using the URLs panel. You can edit just a single occurrence of a URL, or you can make your changes ripple throughout the document.

To edit a URL:

- 1 Select the URL to be edited from the URL preview pane.
- 2 Choose Edit URL from the URL panel Options menu.
- 3 Edit the URL. Select Change All Occurrences in Document if you want to update this link throughout the entire document.

About absolute and relative URLs

When you enter a URL in the URL panel, you can enter an absolute or relative URL:

- If you are linking to a web page that is beyond your own website, you must use an absolute URL.
- If you are linking to a web page within your website, you can use an absolute URL or a relative URL.

Absolute URLs are complete URLs that include the server protocol, which is usually `http://` for web pages. For example, `http://www.macromedia.com/support/fireworks` is the absolute URL for the Macromedia Fireworks Support web page. Absolute URLs remain accurate regardless of the location of the source document, but they do not link correctly if the target document is moved.

Relative URLs are relative to the folder containing the source document. These examples show the navigation syntax of relative URLs:

- `file.htm` links to a file located in the same folder as the source document.
- `.././file.htm` links to a file located in the folder two levels above the folder containing the source document. Each `../` represents one level.
- `htmldocs/file.htm` links to a file located in a folder named `htmldocs`, which is in the folder containing the source document.

Relative URLs are usually the simplest ones to use for links to files that will always remain in the same folder as the current document.

Importing and exporting URLs

If the URL panel contains URLs that you want to use again in other Fireworks documents, you can export them for later use. You can then easily import them into any of your other Fireworks documents for easy access.

You can also import all URLs referenced in any existing HTML document.

To export URLs:

- 1 Choose Export URLs from the URL panel Options menu.
- 2 Enter a filename and click Save.

An HTML file is created. This file contains the URLs you have exported.

To import URLs:

- 1 Choose Import URLs from the URL panel Options menu.
- 2 Select an HTML file and click Open.

All URLs in this file are imported.

CHAPTER 9

Slices, Rollovers, and Hotspots

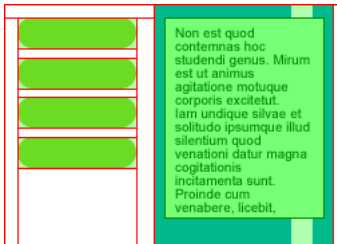
Slices are the basic building blocks for creating interactivity in Macromedia Fireworks MX 2004. Slices are web objects—they exist not as images, but ultimately as HTML code. You can view, select, and rename them through the Web Layer in the Layers panel. This chapter discusses the concepts central to slicing and gives procedures for using slices to incorporate interactivity into your web pages.

Using the drag-and-drop rollover method of attaching interactivity to slices, you can quickly create rollover and swap-image effects in the workspace. You can view the assigned behaviors in the Behaviors panel and create more complex interactions using this panel.

You can also incorporate interactivity into your web pages with hotspots. Hotspots are used to create an image map, which is HTML code that defines a *hot region* in an HTML document. These regions do not necessarily link anywhere; they could just trigger a behavior or define alternate text. Hotspots can also receive mouse events, allowing JavaScript behaviors to be acted on in slices.

Creating and editing slices

Slicing cuts up a Fireworks document into smaller pieces and exports each piece as a separate file. Upon export, Fireworks also creates an HTML file containing table code to reassemble the graphic in a browser.



Slicing cuts a document into multiple pieces, which are exported as separate files.

Slicing an image has at least three major advantages:

Optimizing One challenge of web graphic design is ensuring that images download quickly without sacrificing quality. Slicing enables you to optimize each individual slice using the most appropriate file format and compression settings. For more information, see [Chapter 12, “Optimizing and Exporting,”](#) on page 225.

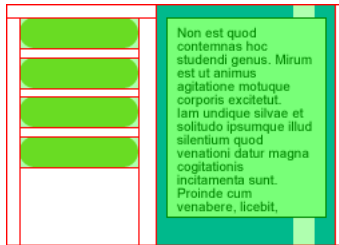
Interactivity You can use slices to create areas that respond to mouse events. For information on attaching interactivity to slices, see [“Making slices interactive”](#) on page 173.

Updating parts of a web page Slicing allows you to easily update parts of a web page that change frequently. For example, your company’s web page might have an employee-of-the-month section that changes monthly. Slicing enables you to quickly change just the employee’s name and photo without replacing the entire page.

Creating slice objects

You can create a slice object by drawing it with the Slice tool or by inserting a slice based on a selected object.

The lines extending from the slice object are slice guides, which determine the boundaries of the separate image files into which the document is split on export. These guides are red by default.



To insert a rectangular slice based on a selected object:

- 1 Choose Edit > Insert > Slice. The slice is a rectangle whose area includes the outermost edges of the selected object.
- 2 If more than one object is selected, choose how to apply slices:
 - Single** creates a single slice object that covers all selected objects.
 - Multiple** creates a slice object for each selected object.

To draw a rectangular slice object:

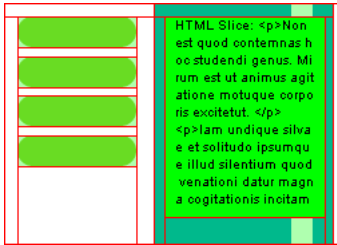


- 1 Choose the Slice tool.
- 2 Drag to draw the slice object. The slice object appears on the Web Layer, and the slice guides appear in the document.

Note: You can adjust the position of a slice as you drag to draw it. While holding down the mouse button, simply press and hold down the Spacebar, then drag the slice to another location on the canvas. Release the Spacebar to continue drawing the slice.

Creating HTML slices

An HTML slice designates an area where ordinary HTML text appears in the browser. An HTML slice does not export an image; it exports HTML text that appears in the table cell defined by the slice.



HTML slices are useful if you want to quickly update text that appears on your website without having to create new graphics.

To create an HTML slice:

- 1 Draw a slice object and leave it selected.
- 2 In the Property inspector, choose HTML from the Type pop-up menu.
- 3 Click Edit.
- 4 Type text in the Edit HTML Slice window, and format the text if desired by adding HTML text-formatting tags.

Note: Alternatively, you can add HTML text-formatting tags to the HTML after it has been exported using a text editor or HTML editor such as Macromedia Dreamweaver.

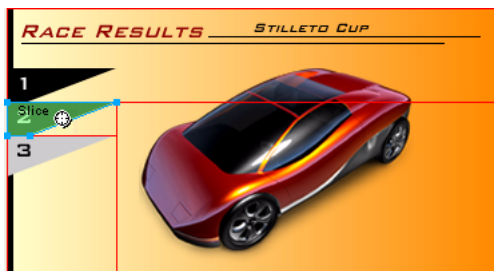
- 5 Click OK to apply your changes and close the Edit HTML Slice window.

The text and HTML tags you entered appear in your Fireworks PNG file on the body of the slice as raw HTML code.

Note: HTML text slices may vary in appearance when viewed in different browsers and on different operating systems, because font size and type can be set in the browser.

Creating nonrectangular slices

Rectangular slices may not be sufficient when you're trying to attach interactivity to a nonrectangular image. If you plan to attach a rollover behavior to a slice, for example, and your slice objects overlap or have irregular shapes, then a rectangular slice may swap unwanted background graphics along with the swap image. Fireworks solves this problem by allowing you to draw slices in any polygonal shape using the Polygon Slice tool.



You can also insert a slice on top of the vector path to create irregular slice shapes.

To draw a polygon slice object:



- 1 Choose the Polygon Slice tool.
- 2 Click to place the vector points of the polygon. The Polygon Slice tool draws only straight line segments.
- 3 When drawing a polygon slice object around objects with soft edges, be sure to include the entire object to avoid creating unwanted hard edges in the slice graphic.
- 4 To stop using the Polygon Slice tool, choose another tool from the Tools panel. You do not have to click the first point again to close the polygon.

Note: Be careful not to overuse polygon slices, because they require more JavaScript code than similar rectangular slices. Using too many polygon slices can increase web browser processing time.

To create a polygon slice from a vector object or path:

- 1 Select a vector path.
- 2 Choose Edit > Insert > Hotspot.
- 3 Choose Edit > Insert > Slice.

A slice is generated that conforms to the shape of the vector object.

Note: To avoid exporting an unnecessary image map into the HTML, you may want to delete the hotspot after completing these steps.

Viewing and displaying slices and slice guides

You can control the visibility of slices and other web objects in your document using the Layers panel and the Tools panel. When you turn slice visibility off for the whole document, slice guides are hidden too.

Using the Property inspector, you can organize slices by assigning a unique color to each slice object. You can also change the color of slice guides through the View menu.

Viewing slices in the Layers panel

The Web Layer displays all the web objects in the document so that you can select and view each one.

To view and select a slice in the Layers panel:

- 1 Choose Window > Layers to open the Layers panel.
- 2 Expand the Web Layer by clicking the Plus (+) button (Windows) or triangle (Macintosh).
The Web Layer displays the full list of web objects currently in your document.
- 3 Click a slice name to select it.

The slice is highlighted in the Web Layer and is selected on the canvas.

Showing and hiding slices

Hiding a slice renders the slice invisible in the Fireworks PNG file. You can turn off all or some web objects. Because slices are web objects, they are listed beneath the Web Layer in the Layers panel, where visibility can be turned on or off for a selected slice. You can also control slice visibility through the Tools panel. Hiding a slice object does not prevent the slice from being exported in the HTML.

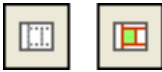
To hide and show particular slices and hotspots:



- 1 Click the eye icon next to the individual web objects in the Layers panel.
- 2 Click in the Eye column to turn visibility back on. The eye icon reappears when web objects are visible again.

To hide or show all hotspots, slices, and guides, do one of the following:

- Click the appropriate Hide/Show Slices button in the Web tools section of the Tools panel.



- Click the eye icon next to the Web Layer in the Layers panel.

To hide or show slice guides in any document view:

- Choose View > Slice Guides.

Changing slice and slice guide color

If the colors used in a document are similar to the slice color, it can be difficult to see slices against the objects in the document. For ease of viewing, you can assign a new color to selected slices. Assigning unique colors to individual slices also helps you organize them. You can alter slice guide color as well.

Note: When you preview your document, deselected slices are visible as a white overlay.

To change the color of a selected slice object:

- In the Property inspector, choose a new color from the color box.

To change the color of slice guides:

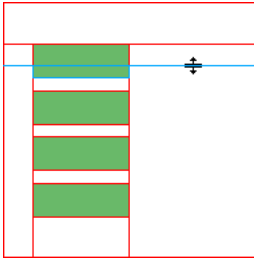
- 1 Choose View > Guides > Edit Guides.
- 2 Choose a new color from the Slice Color section of the Guides dialog box and click OK.

Editing slices

In Fireworks you can work with a slice layout as if it were a table in a word-processing application. When you drag a slice guide to resize a slice, Fireworks automatically resizes all adjacent rectangular slices as well. In addition, you can use the Property inspector to resize and transform slices as you would vector and bitmap objects.

Moving slice guides to edit slices

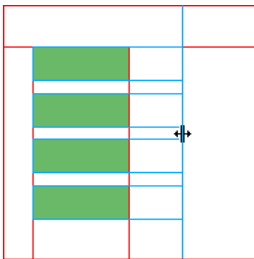
Slice guides define the perimeter and position of slices. Slice guides extending beyond slice objects define how the rest of the document is sliced upon export. You can change the shape of a rectangular slice object by dragging the slice guides that surround it. Nonrectangular slice objects cannot be resized by moving slice guides.



Resizing a slice object by dragging its slice guides

Note: If you drag slice guides that surround a Fireworks button in the Document window, Fireworks resizes the slice that defines the active area for that button. However, you cannot delete the active area for a Fireworks button by dragging the slice guides that surround it.

If multiple slice objects are aligned along a single slice guide, you can drag that slice guide to resize all the slice objects simultaneously.



Resizing multiple slice objects by dragging a single guide

In addition, if you drag one guide along a given coordinate, all other guides on that same coordinate move with it.

To resize one or more slices:

- 1 Position the Pointer or Subselection tool over a slice guide.
The pointer changes to the guide movement pointer.
- 2 Drag the slice guide to the desired location.
The slices are resized, and all adjacent slices are automatically resized as well.



To reposition a slice guide to the far edge of the canvas,

- Use the Pointer or Subselection tool to drag the slice guide beyond the edge of the canvas.

To move adjacent slice guides:

- 1 Shift-drag a slice guide across adjacent slices guides.
- 2 Release the slice guide in the desired location.

All slice guides that you dragged across are moved to this location.

Tip: You can cancel this operation by releasing the Shift key before you release the mouse button. All slice guides that were picked up snap back to their original positions.

Using tools to edit slice objects

You can use the Pointer, Subselection, and Transform tools to reshape or resize a slice. You can skew and distort only polygon slices.

Note: Resizing and reshaping slices using these tools can create overlapping slices, because the size of adjacent slice objects is not automatically adjusted. When slices overlap, the topmost slice takes precedence if interactivity is involved. To avoid overlapping slices, use slice guides to edit slices. For more information, see [“Moving slice guides to edit slices” on page 172](#).

To edit the shape of a selected slice, do one of the following:

- Choose the Pointer or Subselection tool and drag the slice’s corner points to modify its shape.
- Use a transformation tool to perform the desired transformation.

For more information on using the transformation tools, see [“Transforming and distorting selected objects and selections” on page 21](#).

Note: Transforming a rectangular slice may change its shape, position, or dimensions, but the slice itself remains rectangular.

About using the Property inspector or Info panel to edit slice objects

You can also change a slice object’s position and size numerically using the Property inspector. For more information about changing an object’s dimensions numerically, see [“Transforming objects numerically” on page 24](#). For more information about changing an object’s position numerically, see [“Editing selected objects” on page 19](#).

Making slices interactive

The basic building blocks for creating interactivity in Fireworks are slice objects. Fireworks offers two ways to make slices interactive:

- The drag-and-drop rollover method is the easiest way to make a slice interactive. By merely dragging a slice’s behavior handle and dropping it onto a target slice, you can quickly create simple interactivity.
- The Behaviors panel allows you to create more complex interactivity. The Behaviors panel contains a variety of interactive behaviors you can attach to slices. By attaching multiple behaviors to a single slice, you can create interesting effects. You can also choose from a variety of mouse events that trigger interactive behaviors.

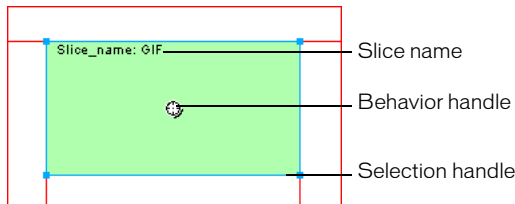
Behaviors in Fireworks are compatible with Macromedia Dreamweaver behaviors. When you export a Fireworks rollover to Dreamweaver, you can edit Fireworks behaviors using the Dreamweaver Behaviors panel.

Adding simple interactivity to slices

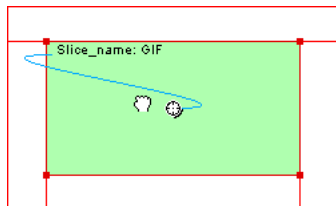
The drag-and-drop rollover method is a fast and efficient way to create rollover and swap-image effects.

Specifically, the drag-and-drop rollover method allows you to determine what happens to a slice when the pointer passes over it. The end result is commonly referred to as a rollover image. Rollover images are graphics that change appearance in a web browser when you move the pointer over them.

When a slice is selected, a round circle with cross hairs appears in the center of the slice. This is called a *behavior handle*.



By dragging the behavior handle from a triggering slice and dropping it onto a target slice, you can easily create rollover and swap-image effects. The trigger and target can be the same slice.

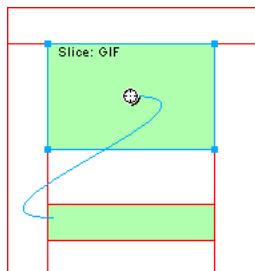


Hotspots also have behavior handles for incorporating rollover effects. For more information, see [“Creating hotspots” on page 185](#).

About rollovers

Rollovers all work the same way. One graphic triggers the display of another when the pointer rolls over it. The trigger is always a web object—a slice, hotspot, or button.

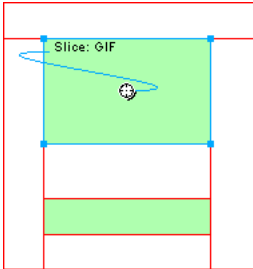
The simplest rollover swaps an image in Frame 1 with an image directly below it in Frame 2. You can build more complicated rollovers as well. Swap-image rollovers can swap in images from any frame; disjoint rollovers swap in an image from a slice other than the trigger slice.



In Fireworks, when you select a trigger web object created using a behavior handle or the Behaviors panel, all of its behavior relationships are displayed. By default, a rollover interaction is represented by a blue behavior line.

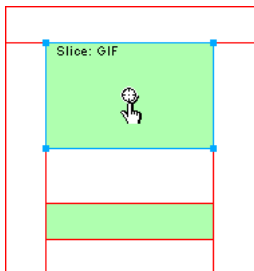
Creating a simple rollover

A simple rollover swaps in the frame directly under the top frame and involves only one slice.



To attach a simple rollover to a slice:

- 1 Ensure that the trigger object is not on a shared layer. For more information, see [“Sharing layers” on page 133](#).
- 2 Choose Edit > Insert > Slice to create a slice on top of the trigger object.
- 3 Create a new frame in the Frames panel by clicking the New/Duplicate Frame button.
- 4 Create, paste, or import an image to use as the swap image on the new frame.
Position the image beneath the slice you created in step 2, which is still visible even though you’re in Frame 2. Slices are visible across all frames.
- 5 Select Frame 1 in the Frames panel to return to the frame that has the original image.
- 6 Select the slice and place the pointer over the behavior handle. The pointer changes to a hand.



Note: You can select the slice while in any frame.

- 7 Click the behavior handle and choose Simple Rollover from the menu.
- 8 Click the Preview tab and test the simple rollover, or press F12 to preview it in a browser.

Creating a disjoint rollover

A disjoint rollover swaps in an image under a web object when the pointer rolls over another web object. In response to a pointer rolling over or clicking a trigger image, an image appears in a different location on the web page. The image that is rolled over is considered the trigger; the image that changes is considered the target.

As with simple rollovers that use just one slice, you first have to set up the trigger and target slices and the frame in which the swap image resides. Then you can link the trigger to the target slice with a behavior line.

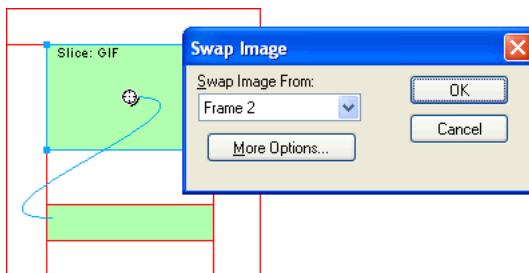
Note: The trigger for a disjoint rollover doesn't have to be a slice. Hotspots and buttons also have behavior handles that can be used to create disjoint rollovers. For more information on hotspots, see [“Creating hotspots” on page 185](#). For more information about buttons, see [“Creating button symbols” on page 191](#).

To attach a disjoint rollover to a selected image:

- 1 Choose Edit > Insert > Slice or Hotspot to attach a slice or hotspot to the trigger image.

Note: This step is not necessary if the selected object is a button or if a slice or hotspot already covers the image.

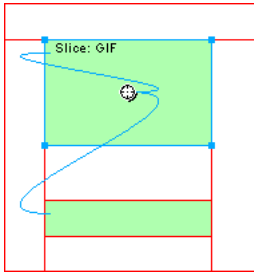
- 2 Create a new frame by clicking the New/Duplicate Frame button in the Frames panel.
- 3 Place a second image, to be used as the target, in the new frame in the desired location on the canvas. You can place the image anywhere other than beneath the slice you created in step 1.
- 4 Select the image, and then choose Edit > Insert > Slice to attach a slice to the image.
- 5 Select Frame 1 in the Frames panel to return to the frame that has the original image.
- 6 Select the slice, hotspot, or button that covers the trigger area (the original image) and place the pointer over the behavior handle. The pointer changes to a hand.
- 7 Drag the behavior handle for the trigger slice or hotspot to the target slice you created in step 4. The behavior line extends from the center of the trigger to the upper left corner of the target slice, and the Swap Image dialog box opens.



- 8 From the Swap Image From pop-up menu, select the frame you created in step 2, and click OK.
- 9 Click the Preview button to preview and test the disjoint rollover.

Applying multiple rollovers to a slice

You can drag more than one behavior handle from a single slice to create multiple swap behaviors. For example, you can trigger a rollover and a disjoint rollover from the same slice.



A slice triggering a rollover behavior and a disjoint rollover behavior

Note: You can also add multiple behaviors using the Behaviors panel. For more information, see [“Using the Behaviors panel to add interactivity to slices” on page 177](#).

To apply more than one rollover to a selected slice:

- 1 Drag a behavior handle from the selected slice to the edge of the same slice or onto another slice.
Dragging the handle to the upper left edge of the same slice creates a swap image, and dragging it to another slice creates a disjoint rollover.
- 2 Select the frame of the swap image and click OK.
- 3 Create more rollovers by repeating steps 1 and 2 as many times as desired.

Removing a drag-and-drop rollover

You can easily remove a drag-and-drop rollover from a slice, hotspot, or button.

To remove a drag-and-drop rollover from a selected web object or button:

- 1 Click on the blue behavior line you want to remove.
- 2 Click OK to remove the swap image behavior.

Using the Behaviors panel to add interactivity to slices

In addition to rollovers, you can attach other types of interactivity to slices using the Behaviors panel. You can create custom interactions by editing existing behaviors.

Note: Although you can create simple, disjoint, and complex rollovers with the Behaviors panel, the drag-and-drop rollover method is recommended. For more information, see [“Adding simple interactivity to slices” on page 174](#).

The following behaviors are available in Fireworks:

Simple Rollover adds a rollover behavior to the selected slice using Frame 1 as the Up state and Frame 2 as the Over state. After you select this behavior, you need to create an image in the second frame, under the same slice, to create the Over state. The Simple Rollover option is actually a behavior group containing the Swap Image and Swap Image Restore behaviors.

Swap Image replaces the image under the specified slice with the contents of another frame or the contents of an external file.

Swap Image Restore restores the target object to its default appearance in Frame 1.

Set Nav Bar Image sets a slice to be a part of a Fireworks navigation bar. Each slice that is part of the navigation bar must have this behavior. The Set Nav Bar Image option is actually a behavior group containing the Nav Bar Over, Nav Bar Down, and Nav Bar Restore behaviors. This behavior is automatically set for you by default when you use the Button Editor to create a button that includes an Include Over While Down state or Show Down Image Upon Load state. When you create a two-state button, a simple rollover behavior is assigned to its slice. When you create a three- or four-state button, a Set Nav Bar Image behavior is assigned to its slice. For more information on buttons, see [“Creating button symbols” on page 191](#).

Nav Bar Over specifies the Over state for the currently selected slice when it is part of a navigation bar and optionally specifies the Preload images state and Include Over While Down state.

Nav Bar Down specifies a Down state for the currently selected slice when it is part of a navigation bar and optionally specifies a Preload images state.

Nav Bar Restore restores all the other slices in the navigation bar to their Up state.

Set Pop-up Menu attaches a pop-up menu to a slice or hotspot. When you apply a pop-up menu behavior, you can use the Pop-up Menu Editor. For more information, see [“Creating pop-up menus” on page 200](#).

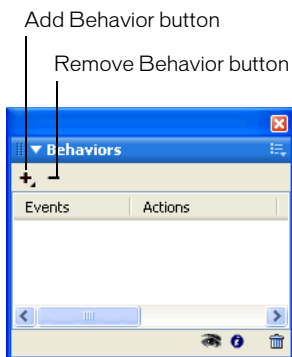
Set Text of Status Bar lets you define text for display in the status bar at the bottom of most browser windows.

Attaching behaviors

Using the Behaviors panel, you can attach a behavior to a slice. You can also attach more than one behavior.

To attach a behavior to a selected slice using the Behaviors panel:

- 1 Click the Add Behavior button (the Plus button) in the Behaviors panel.



- 2 Select a behavior from the Add Behavior button. For an explanation of each behavior, see [“Using the Behaviors panel to add interactivity to slices” on page 177](#).

Editing behaviors

The Behaviors panel also gives you the ability to edit existing behaviors. You can specify the type of mouse event (such as `onClick`) that triggers the behavior.

Note: You cannot change the event for Simple Rollover and Set Nav Bar Image.

To change the mouse event that activates the behavior:

- 1 Select the trigger slice or hotspot containing the behavior you want to modify.
All behaviors associated with that slice or hotspot are displayed in the Behaviors panel.
- 2 Select the behavior you want to edit.
- 3 Click the arrow beside the event and choose a new event from the pop-up menu:
 - onMouseOver** triggers the behavior when the pointer rolls over the trigger area.
 - onMouseOut** triggers the behavior when the pointer leaves the trigger area.
 - onClick** triggers the behavior when the trigger object is clicked.
 - onLoad** triggers the behavior when the web page is loaded.

Using external image files for swap image

You can use an image outside the current Fireworks document as the source for a swap image. Source images can be in GIF, animated GIF, JPEG, or PNG format. When you choose an external file as the image source, Fireworks swaps that file with the target slice when the swap image is triggered in a web browser.

The file must have the same width and height as the slice it is swapping into. If it does not, the browser resizes the file to fit within the slice object. Resizing the file may reduce its quality, especially in the case of an animated GIF.

To choose an external image file as the source for a swap image:

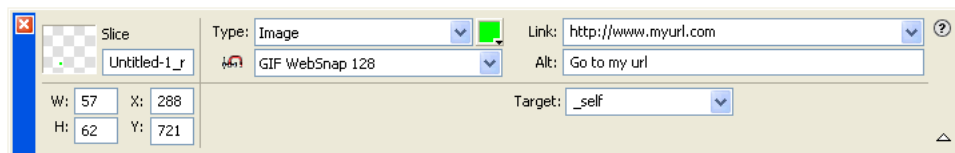
- 1 While in the Swap Image, Nav Bar Over, or Nav Bar Down dialog box, choose Image File and click the folder icon.
Note: If you don't see this option in the Swap Image dialog box, choose More Options and then perform step 1.
- 2 Navigate to the file you want to use, and click Open.
- 3 If necessary, deselect Preload Images (if the external file is an animated GIF).

Precaching can interrupt the display of animated GIFs as rollover states. To avoid this problem, deselect Preload Images when setting up the rollover.

Note: If you plan to export your document for use on the web, be sure that your external image file is accessible from the exported Fireworks HTML. Fireworks creates document-relative paths to image files. It is a good idea to place external files in your local site before using them as swap images in Fireworks. When you upload your files to the web, be sure that the external image file is uploaded as well. For more information on Fireworks HTML, see ["Exporting HTML" on page 252](#).

Preparing slices for export

Using the Property inspector, you can make slices interactive by assigning links and targets to the slices. You can also specify alternate text to be displayed in a browser while an image is loading. In addition, you can choose an export file format to optimize a selected slice. If the Property inspector is minimized, click the expander arrow in the lower right corner to see all slice properties.



Slice properties in the Property inspector

Using the Property inspector or the Layers panel, you can give slices unique names. Fireworks uses the name you specify to name the files that are generated from slicing upon export. If you don't enter a slice name in the Property inspector or the Layers panel, Fireworks automatically names slices for you upon export. You can change the auto-naming convention that Fireworks uses through the HTML Setup dialog box.

Fireworks exports a sliced Fireworks document as an HTML file and a series of graphic files. You can define properties for the exported HTML file using the HTML Setup dialog box.

Assigning URLs

A URL, or Uniform Resource Locator, is the address of a specific page or file on the Internet. When you assign a URL to a slice, users can navigate to that address by clicking the area defined by the slice in their web browser.

To assign a URL to a selected slice:

- Enter a URL in the Link text box of the Property inspector.

Tip: If you intend to reuse URLs, you can create a URL library in the URL panel and then store URLs in the URL library. For more information, see [“Working with URLs” on page 164](#).

Entering alternate text

Alternate, or alt, text appears on the image placeholder while the image is downloading from the web; it also substitutes for graphics that fail to download. In some newer versions of browsers, the text also appears next to the pointer as a tooltip.

Entering brief, meaningful alternate text has become increasingly important in web design. A growing number of visually impaired people are using screen-reading applications, which read alternate text in a computer-generated voice as the pointer passes over graphics on a web page.

To specify alt text for a selected slice or hotspot:

- In the Property inspector, type the text in the Alt Text box.

Assigning a target

A target is an alternate web page frame or web browser window in which the linked document opens. You can specify a target for a selected slice in the Property inspector. If the Property inspector is minimized, click the expander arrow to see all properties.

To specify a target for a selected slice or hotspot in the Property inspector:

- Type the name of the HTML frame in the Target text box or choose a reserved target from the Target pop-up menu:
 - blank** loads the linked documents in a new, unnamed browser window.
 - parent** loads the linked document in the parent frameset or window of the frame that contains the link. If the frame containing the link is not nested, then the linked document loads into the full browser window.
 - self** loads the linked document in the same frame or window as the link. This target is implied, so you usually need not specify it.
 - _top** loads the linked document in the full browser window, thereby removing all frames.

Export settings

You can optimize a slice by selecting an option from the Export Settings pop-up menu in the Property inspector or Optimize panel. You can choose from common export settings to quickly set a file format and apply several format-specific settings. For more information on using and customizing these settings, see [“Using optimization settings” on page 231](#).

Naming slices

Slicing cuts an image into pieces. Fireworks exports each piece on each frame as a separate file, so each file must have a name.

Fireworks automatically names each slice file upon export. You can accept the default naming convention, change the convention, or enter a custom name for each slice.

Custom-naming slice files

You can assign names to slices so that you can easily identify slice files in your website file structure. For example, if you have a button on a navigation bar that returns to the home page, you could name the slice *Home*.

To enter a custom slice name, do one of the following:

- Select the slice on the canvas, enter a name in the Object Name box in the Property inspector, and press Enter.
 - Double-click the name of the slice in the Web Layer, enter a new name, and press Enter.
- Do not add a file extension to the base name. Fireworks automatically adds file extensions to slice files upon export.

Auto-naming slice files

If you do not enter a slice name in either the Property inspector or the Layers panel, Fireworks reverts to auto-naming. Auto-naming assigns a unique name to each slice file automatically based on the default naming convention.

To auto-name a slice file:

- When you export your sliced image, enter a name in the File Name (Windows) or Name (Macintosh) text box in the Export dialog box. Do not add a file extension. Fireworks automatically adds file extensions to slice files upon export.

Changing the default auto-naming convention

You can change the naming convention for slices from the Document Specific tab in the HTML Setup dialog box.

Fireworks lets you specify your own naming convention using a wide range of naming options. You can create a naming convention that contains up to eight elements. An element can consist of any of the following auto-naming options.

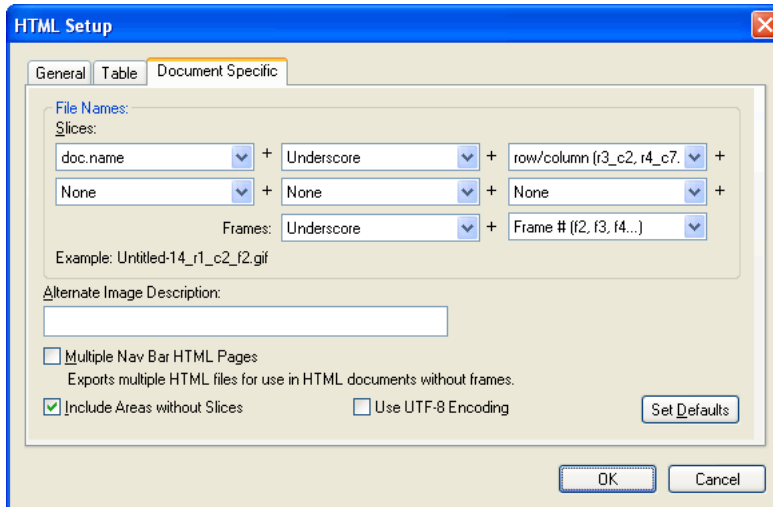
Option	Description
None	No name is applied to the element.
doc.name	The element takes the name of the document.
"slice"	You can insert the word "slice" into the naming convention.
Slice # (1,2,3...)	The element is labeled numerically or alphabetically, according to the style you choose.
Slice # (01,02,03...)	
Slice # (A,B,C...)	
Slice # (a,b,c...)	
row/column (r3_c2, r4_c7...)	Row (r##) and Col (c##) designate the rows and columns of the table that web browsers use to reconstruct a sliced image. You can use this information in the naming convention.
Underscore	The element uses any of these characters typically as separators between other elements.
Period	
Space	
Hyphen	

For example, if the document name is mydoc, the naming convention doc.name + "slice" + Slice # (A,B,C...) results in a slice called mydocsliceA. Chances are that you will never require a naming convention that uses all eight elements.

If a slice has more than one frame, by default Fireworks adds a number to each frame's file. For example, if you enter the custom slice filename **home** for a three-state button, then Fireworks names the Up state graphic home.gif, the Over state graphic home_f2.gif, and the Down state graphic home_f3.gif. You can create your own naming convention for multiframe slices using the HTML Setup dialog box.

To change the default auto-naming convention:

- 1 Choose File > HTML Setup to open the HTML Setup dialog box.
- 2 Click the Document Specific tab.
- 3 In the File Names section, create your new naming convention by selecting from the lists.



- 4 (Optional) To set this information as the default for all new Fireworks documents, click Set Defaults.

Note: Use caution when choosing None as a menu option for slice auto-naming. If you choose None as the option for any of the first three menus, Fireworks exports slice files that overwrite one another, resulting in a single exported graphic and a table that displays this graphic in every cell.

Defining how HTML tables are exported

Slicing defines how the HTML table structure appears when a Fireworks document is exported for use on the web.

When you export a sliced Fireworks document to HTML, your document is reassembled using an HTML table. Each sliced element from the Fireworks document resides in a table cell. Once exported, a Fireworks slice translates to a table cell in HTML.

You can specify how a Fireworks table is reconstructed in a browser. Among other options, you can choose whether to use spacers or nested tables when exporting to HTML:

- Spacers are images that help table cells align properly when viewed in a browser.
- A nested table is a table within a table. Nested tables do not use spacers. They may load more slowly in browsers, but because there are no spacers, it is easier to edit their HTML.

For more information about HTML, see [“Exporting HTML” on page 252](#).

To define how Fireworks exports HTML tables:

- 1 Choose File > HTML Setup, or click the Options button in the Export dialog box.
- 2 Click the Table tab.
- 3 Choose a spacing option from the Space With pop-up menu:

Nested Tables – No Spacers creates a nested table with no spacers.

Single Table – No Spacers creates a single table with no spacers. This option can cause tables to be displayed incorrectly in some cases.

1-Pixel Transparent Spacer uses a 1-pixel-by-1-pixel transparent GIF as a spacer that is resized as needed in the HTML. This generates a 1-pixel-high row across the top of the table and a 1-pixel-wide column down the right side.

- 4 Choose a cell color for HTML slices:
 - To give cells the same background color as the document canvas, choose Use Canvas Color.
 - To choose a different color, deselect Use Canvas Color and choose a color from the color pop-up window.

Note: If you choose a color from the color pop-up window, it applies only to HTML slices; image slices continue to use the canvas color.

- 5 Choose what to place in empty cells from the Contents pop-up menu:

None causes empty cells to remain blank.

Spacer Image places a small transparent image called spacer.gif in empty cells.

Non-breaking Space places an HTML space tag in empty cells. The cell appears hollow.

Note: Empty cells occur only if you deselect Include Areas Without Slices in the Export dialog box during export.

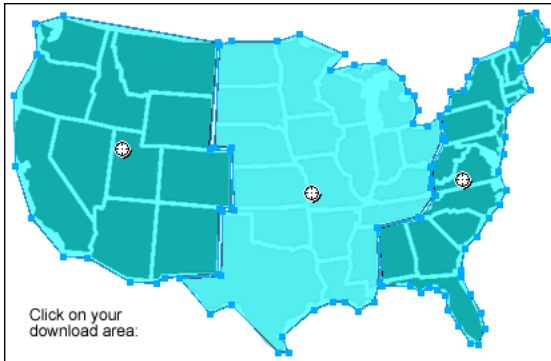
- 6 Click OK.

For more information about specifying HTML export options, see [“Setting HTML export options” on page 259](#).

Note: You can specify unique table export settings for sliced objects for each document. Or you can use the Set Defaults button on the Document Specific tab of the HTML Setup dialog box to apply defaults for all new documents.

Working with hotspots and image maps

Web designers can use hotspots to make small parts of a larger graphic interactive, linking areas of web graphics to a URL. You can create an image map in Fireworks by exporting HTML from a document that contains hotspots.



An image map with hotspots

Hotspots and image maps are often less resource-intensive than sliced graphics. Slicing can be more resource-intensive to web browsers because of the additional HTML code they must download and the processing power required to reassemble sliced graphics.

Note: It is possible to create a sliced image map. Exporting a sliced image map typically generates many graphic files. For more information about slicing, see [“Creating slice objects” on page 168](#).

Hotspots are ideal when you want areas of an image to link to other web pages, but you don’t need those areas to highlight or produce rollover effects in response to mouse movement or actions. Hotspots and image maps are also ideal when the graphic onto which you’ve placed your hotspots would be best exported as a single graphic file—in other words, the entire graphic would best be exported using the same file format and optimization settings.

Creating hotspots

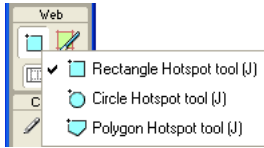
After you identify areas on a source graphic that would make good navigation points, you create the hotspots and then assign URL links, pop-up menus, status bar messages, and alt text to them. There are two ways to create hotspots:

- You can draw the hotspot around a target area in the graphic using the Rectangle, Circle, or Polygon (odd-shaped) Hotspot tools.
- You can select an object and insert the hotspot over it.

A hotspot need not always be a rectangle or a circle. You can also create polygon hotspots composed of many points. This can be a good approach when working with intricate images.

To create a rectangular or circular hotspot:

- 1 Choose the Rectangle Hotspot or Circle Hotspot tool from the Web section of the Tools panel.



- 2 Drag the hotspot tool to draw a hotspot over an area of the graphic. Hold down Alt (Windows) or Option (Macintosh) to draw from a center point.

Note: You can adjust the position of a hotspot as you drag to draw it. While holding down the mouse button, simply press and hold down the Spacebar, then drag the hotspot to another location on the canvas. Release the Spacebar to continue drawing the hotspot.

To create an odd-shaped hotspot:



- 1 Choose the Polygon Hotspot tool.
- 2 Click to place vector points, much as you would draw straight line segments with the Pen tool. Whether the path is open or closed, the fill defines the hotspot area.

To create a hotspot by tracing one or more selected objects:

- 1 Choose Edit > Insert > Hotspot.

If you selected more than one object, a message appears asking whether you want to create a single rectangular hotspot covering all objects or multiple hotspots, one for each object.

- 2 Click Single or Multiple. The Web Layer displays the new hotspot or hotspots.

Editing hotspots

Hotspots are web objects, and like many other objects, they can be edited using the Pointer, Subselection, and Transform tools. For more information on using these tools to edit a web object, see [“Using tools to edit slice objects” on page 173](#).

You can change a hotspot’s position and size numerically using the Property inspector or the Info panel. For more information about changing an object’s dimensions numerically, see [“Transforming objects numerically” on page 24](#). For more information about changing an object’s position numerically, see [“Editing selected objects” on page 19](#).

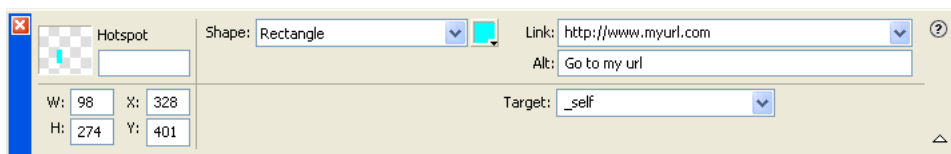
You can also change a hotspot’s shape using the Property inspector.

To convert a selected hotspot to a rectangle, circle, or polygon hotspot:

- In the Property inspector, choose Rectangle, Circle, or Polygon from the Hotspot Shape pop-up menu.

Preparing hotspots for export

You can use the Property inspector to assign URLs, alternate text, targets, and custom names to hotspots. If the Property inspector is minimized, click the expander arrow in the lower right to see all properties.



You assign hotspot properties the same way you assign slice properties. For more information on using the Property inspector to assign URLs, alt text, target frames, and custom names, see [“Preparing slices for export” on page 180](#).

Creating image maps

After you’ve inserted several hotspots on top of a desired graphic, you must export the graphic as an image map so it will function in a web browser. Exporting an image map generates the graphics and the HTML containing map information for hotspots and corresponding URL links.

Note: Fireworks produces only client-side image maps when exporting.

As an alternative to exporting, you can copy your image map to the Clipboard and paste it into Dreamweaver or another HTML editor.

To export an image map or copy it to the Clipboard:

- 1 Optimize the graphic to prepare it for export.
For more information, see [“About optimizing” on page 226](#).
- 2 Choose File > Export.
- 3 If you are exporting your image (as opposed to copying it to the Clipboard), navigate to the folder where you want to place the HTML file, and name the file.
If you have already built a local file structure for your website, you can save the graphic in the appropriate folder for the site from here.
- 4 In the Save as Type pop-up menu, choose HTML and Images.
- 5 Choose an option from the HTML pop-up menu:
Export HTML File generates the required HTML file and corresponding graphics files, which you can later import into Dreamweaver or another HTML editor.
Copy to Clipboard copies all required HTML, including a table if the document is sliced, to the Clipboard so that you can later paste it into Dreamweaver or another HTML editor.
- 6 For Slices, choose None only if the document contains no slices.

- 7 If necessary, choose Put Images in Subfolder and browse to the appropriate folder.

Note: If you choose Copy to Clipboard, this step is not required, and thus the option is disabled.

- 8 Click Save to close the Export dialog box.

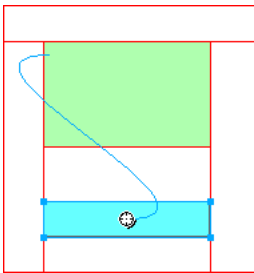
Tip: When you are exporting files, Fireworks can use HTML comments to clearly label the beginning and end of code for image maps and other web features created in Fireworks. By default, HTML comments are not included in the code. To include them, choose Include HTML Comments in the General tab of the HTML Setup dialog box.

For information on placing exported Fireworks content into Dreamweaver, see “Working with Macromedia Dreamweaver MX 2004” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks.

Creating rollovers with hotspots

Using the drag-and-drop rollover method of creating interactivity, you can easily attach a disjoint rollover effect to a hotspot if the target area is defined by a slice. Rollover effects are applied to hotspots the same way that they are to slices. For more information, see “[Adding simple interactivity to slices](#)” on page 174.

Note: A hotspot can trigger only a disjoint rollover. It cannot be the target of a rollover coming from another hotspot or slice.

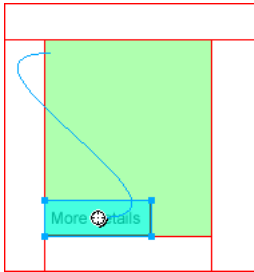


After you create a disjoint rollover with a hotspot, the connecting blue line remains visible only while the hotspot is selected.

Using hotspots on top of slices

You can place a hotspot on top of a slice to trigger an action or behavior. You may want to do this if you have a large graphic and you want only a small portion of it to act as the trigger for an action.

For example, perhaps you have a large graphic with text on it, and you want just the text to trigger an action or behavior, such as a rollover effect. You could place a slice on top of the graphic, and then a hotspot on top of the text. Rolling over just the text triggers the rollover effect, yet the entire graphic beneath the slice swaps out when the rollover effect occurs. Avoid creating hotspots that overlap more than one slice, or unpredictable behavior may result.



To create a trigger for a rollover effect using a hotspot on top of a slice:

- 1 Insert a slice on top of the image you want to swap out.
- 2 Create a new frame in the Frames panel, and insert an image that you will use as your swapped image. Be sure to place it beneath the slice you inserted in step 1.
- 3 Drag a behavior line from the hotspot to the slice that contains the image you want to swap. The Swap Image dialog box opens.
- 4 Choose the frame holding the rollover image from the Swap Image From list, and click OK.

CHAPTER 10

Creating Buttons and Pop-up Menus

In Macromedia Fireworks MX 2004 you can create a variety of JavaScript buttons and pop-up menus, even if you know nothing about JavaScript.

The Fireworks Button Editor leads you through the button-creation process, automating many button-making tasks. The result is a convenient button symbol. After you've created a button symbol, you can easily create instances of the symbol to make a navigation bar, or nav bar.

Fireworks also has a Pop-up Menu Editor, which allows you to quickly and easily create vertical or horizontal pop-up menus. The Advanced tab of the Pop-up Menu Editor gives you creative control over cell spacing and padding, text indentation, cell borders, and other properties.

When you export a button or pop-up menu, Fireworks automatically generates the JavaScript necessary to display it in a web browser. In Macromedia Dreamweaver, you can easily insert JavaScript and HTML code from Fireworks into your web pages, or you can cut and paste the code into any HTML file.

Creating button symbols

Buttons are navigation elements for a web page. Buttons created in the Button Editor have the following characteristics:

- You can make almost any graphic or text object into a button.
- You can create a button from scratch, convert an existing object into a button, or import already created buttons.
- A button is a special type of symbol. You can drag instances of it from the symbol library into your document.

This allows you to change the graphical appearance of a single button and automatically update the appearance of all button instances in a nav bar. For more information on symbols, see [“Using symbols” on page 158](#).

- You can edit the text, URL, and target for one button instance without affecting other instances of the same button, and without breaking the symbol-instance relationship.
- A button instance is encapsulated. When you drag the button instance in the document, Fireworks moves all the components and states associated with it, so there is no need for multiframe editing.

- A button is easy to edit. Double-click the instance on the canvas, and you can change it in the Button Editor or the Property inspector.
- Like other symbols, buttons have a registration point. The registration point is a center point that helps you align text and the different button states while in the Button Editor.

About button states

A button can have up to four different states. Each state represents the button's appearance in response to a mouse event:

The Up state is the default or at-rest appearance of the button.

The Over state is the way the button appears when the pointer is moved over it. This state alerts the user that clicking the mouse is likely to result in an action.

The Down state represents the button after it is clicked. Often a concave image of the button is used to signify that it has been pressed. This button state typically represents the current web page on multibutton navigation bars.

The Over While Down state is the appearance when the user moves the pointer over a button that is in the Down state. This button state typically shows that the pointer is over the button for the current web page on multibutton navigation bars.

With the Button Editor, you can create all of these different button states, as well as an area for triggering the button action.

Using the Button Editor

The Button Editor is where you create and edit a JavaScript button symbol in Fireworks. The tabs along the top of the Button Editor correspond to the four button states and the active area. The tips on each option in the Button Editor help you make design decisions for all four button states.

Creating a simple two-state button

With the Button Editor, you can create custom buttons by drawing shapes, importing graphic images, or dragging objects from the Document window. The Button Editor then takes you through the steps to control the button's behavior.

To create an Up state:

- 1 Choose Edit > Insert > New Button to open the Button Editor.
The Button Editor opens to the Up state tab.
- 2 Import or create the Up state graphic:
 - Drag and drop or import the graphic that will appear as the button's Up state into the work area of the Button Editor.
 - Use the drawing tools to create a graphic or use the Text tool to create a button from text.
 - Click Import a Button and select a ready-made editable button from the Button Import library. If you choose this option, you won't have to worry about creating the remaining states for your button. Each of the button's states will be automatically filled with the appropriate graphics and text.
- 3 If desired, choose the Text tool and create text for the button.

To create an Over state:

- 1 With the Button Editor open, click the Over tab.
- 2 Do one of the following to create the button's Over state:
 - Click Copy Up Graphic to paste a copy of the Up state button into the Over window, and then edit it to change its appearance or text.
 - Drag and drop, import, or draw a graphic.

Creating a three- or four-state button

When creating a button, you may want to add a Down state and an Over While Down state in addition to the Up and Over states. These states give web page users additional visual cues.

You can create a nav bar using two-state or three-state buttons, but only a button with all four states qualifies as a real nav bar button in Fireworks. Fireworks has several Nav Bar behaviors that make buttons act as though they are related to each other. For example, you can create nav bar buttons that act like the push buttons on an old car radio: when the user clicks a button, it remains down until another button is clicked.

Although four-state buttons are not mandatory in a nav bar, using them allows you to take advantage of the built-in Nav Bar behaviors in Fireworks.

For details about creating the Up and Over states for a button, see [“Creating a simple two-state button” on page 192](#).

To create a Down state:

- 1 With a two-state button open in the Button Editor, click the Down tab.
- 2 Do one of the following to create the button's Down state:
 - Click Copy Over Graphic to paste a copy of the Over state button into the Down window, and then edit it to change its appearance.
 - Drag and drop, import, or draw a graphic.

Note: When you insert or create a graphic for the Down state, the Include Nav Bar Down State option is automatically chosen. This button state is for buttons that are part of navigation bars.

To create an Over While Down state:

- 1 With a three-state button open in the Button Editor, click the Over While Down tab.
- 2 Do one of the following to create the button's Over While Down state:
 - Click Copy Down Graphic to paste a copy of the Down state graphic into the Over While Down window, and then edit it to change its appearance.
 - Drag and drop, import, or draw a graphic.





Note: When you insert or create a graphic for the Over While Down State, the Include Nav Bar Over While Down State option is automatically chosen. This button state is for buttons that are part of navigation bars.

Using bevel effects to draw button states

As you create graphics for each button state, you can apply preset Live Effects to create common appearances for each state. For example, if you are creating a four-state button, you can apply the Raised effect to the Up state graphic, the Highlighted effect to the Down state graphic, and so on.

To apply preset Live Effects to a button symbol:

- 1 With the desired button symbol open in the Button Editor, select the graphic to which you want to add a Live Effect.
- 2 Click the Add Effects button in the Property inspector.
- 3 In the pop-up menu that appears, do one of the following:
 - Choose Bevel and Emboss > Inner Bevel.
 - Choose Bevel and Emboss > Outer Bevel.
- 4 In the pop-up window that appears, choose a button preset effect. These are described below.

Button preset effect	Description
Raised 	The bevel appears to rise from the underlying objects.
Highlighted 	The button's colors lighten.
Inset 	The bevel appears to sink into the underlying objects.
Inverted 	The bevel appears to sink into the underlying objects, and the colors lighten.

- 5 Repeat steps 1 through 4 for the remaining button states, giving each state a different button preset effect.

Converting Fireworks rollovers into buttons

You can create buttons from rollovers that you created in previous versions of Fireworks. The components convert to a button, and the new button is placed in the library.

For more information about rollovers, see [“Making slices interactive” on page 173](#).

To convert a Fireworks rollover into a button:

- 1 Delete the slice or hotspot covering the rollover images.
- 2 Choose Show All Frames from the Onion Skinning pop-up menu in the Frames panel.
- 3 Select all the objects to be included in the button.

Tip: Use the Select Behind tool to select objects that are hidden behind others. For more information, see [“Using the Select Behind tool” on page 9](#).

- 4 Choose Modify > Symbol > Convert to Symbol.
The Symbol Properties dialog box opens.
- 5 Enter a name for the symbol in the Name text box.

6 Choose the Button symbol type.

7 Click OK.

The new button is added to the library.

Tip: You can also convert four-frame animations to buttons. Simply select all four objects, and each is placed on its own button state.

Inserting buttons into a document

You can insert instances of button symbols into a document from the Library panel.

To place instances of a button symbol in a document:

- 1 Open the Library panel.
- 2 Drag the button symbol to the document.

To place additional instances of a button symbol in a document, do one of the following:

- Select an instance, and then choose Edit > Clone to place another instance directly in front of the selected instance. The new instance becomes the selected object.

Tip: Cloning button instances is convenient when you create an aligned nav bar, because you can move the clones in one direction with the arrow keys while maintaining alignment with the other position coordinate.

- Drag another button instance from the Library panel to the document.
- Alt-drag (Windows) or Option-drag (Macintosh) an instance on the canvas to create another button instance.
- Copy an instance and then paste additional instances.

Importing button symbols

Button symbols in the Library panel are document-specific. If you have an open document with symbols in the Library panel and then create a new document, the Library panel in the new document will be empty. However, there are several ways to import button symbols into a document's Library panel, either from a library or from another Fireworks document.

To import button symbols into a document's Library panel, do one of the following:

- Drag and drop a button instance from another Fireworks document into the document.
- Cut and paste a button instance from another Fireworks document into the document.
- Import button symbols from a Fireworks PNG file.
- Export button symbols from another Fireworks document to a PNG library file, and then import button symbols from the PNG library file into the document.
- Choose Edit > Libraries and import button symbols into the document's Library panel from the button libraries on the submenu. These libraries contain a wide variety of premade button symbols prepared by Macromedia.

You import and export button symbols just as you import and export animation and graphic symbols. For more information, see [“Importing symbols” on page 162](#) and [“Exporting symbols” on page 163](#).

Editing button symbols

Fireworks button symbols are a special kind of symbol. They have two kinds of properties: some properties change in all instances when you edit an instance of the symbol, and other properties affect only the current instance.

Fireworks button symbols let you take advantage of the convenience of symbols yet allow you to edit certain properties of a button instance, such as text, without affecting other instances.

Editing symbol-level properties

You edit button symbols in the Button Editor. The instance properties that you can modify are those that are typically consistent among buttons in a nav bar:

- Modifications to graphical appearance such as stroke color and type, fill color and type, path shape, and images
- Live Effects, opacity, or blend mode applied to individual objects in the button symbol
- Size and position of the active area
- Core button behavior
- Optimization and export settings
- URL link (also available as an instance-level property)
- Target frame (also available as an instance-level property)

To edit button properties at the symbol level:

- 1 Do one of the following to open the button in the Button Editor:
 - Double-click a button instance in the workspace.
 - In the Library panel, double-click the button preview or the symbol icon beside the button symbol.
- 2 Make changes to the button's characteristics, and click Done.
Changes are applied to all instances of the button symbol.

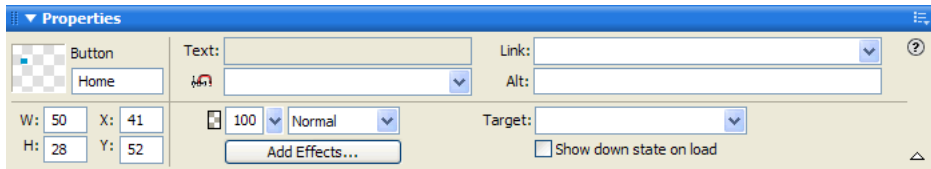
Editing instance-level properties

Instance-level properties are edited in the Property inspector when a single instance is selected. You change these properties for an instance without affecting the associated symbol or any other instances of that symbol. These properties typically differ from button to button in a series of buttons:

- An instance's object name, which appears in the Layers panel and is used for naming the exported slices for the button instance upon export
- Live Effects, opacity, or blend mode applied to the entire instance
- Text characters and text formatting, such as font, size, orientation, and color
- URL link (overrides any URL that exists as a symbol-level property)
- Alternate (alt) image description
- Target frame (overrides any target frame that exists as a symbol-level property)

- Additional behaviors assigned to an instance using the Behaviors panel
- The Show Down State on Load option in the Property inspector for instances in a nav bar

Note: In Fireworks MX 2004, you need not choose the Show Down State on Load option for every button instance in a nav bar. The Document Specific section of the HTML Setup dialog box contains an option called Export Multiple Files. When you choose this option and then export a nav bar, Fireworks MX 2004 exports each HTML page with the corresponding button's Down state. For more information, see [“Setting HTML export options” on page 259](#).



To edit instance-level properties of a single button symbol instance:

- 1 Select the button instance in the work area.
- 2 Set the properties in the Property inspector.

Setting interactive button properties

With Fireworks, you can control the interactive elements of a button, including the active area, URL, target, and alternative (alt) image description.

Modifying the active area of a button symbol

The active area of a button symbol triggers interactivity when a user moves the pointer over it or clicks it in a web browser. The active area of a button is a symbol-level property and is unique to button symbols.

When a button symbol is created, Fireworks automatically creates a special slice large enough to enclose all the states of a button. You can edit a button slice only in the Active Area tab of the Button Editor. Each button can have only one slice. If you draw a slice using a slice tool in the active area, the previous slice is replaced by the newly drawn slice. You can draw hotspot objects in the Active Area tab, but you can edit those hotspots only in the Button Editor.

Note: Web objects that define a button symbol's active area appear in the document when slices and hotspots are not hidden, but a button's web objects are not listed in the Layers panel and cannot be edited in the workspace.

To edit a slice or hotspot in a button symbol's active area:

- 1 Do one of the following to open the button symbol in the Button Editor:
 - Double-click a button instance in the workspace.
 - In the Library panel, double-click the button preview or the symbol icon beside the button symbol.
- 2 Click the Active Area tab.
- 3 Do one of the following:
 - Use the Pointer tool to move or reshape the slice or move a slice guide.
 - Use any of the slice or hotspot tools to draw a new active area.

Setting the URL for a button symbol or instance

A URL, or Uniform Resource Locator, is a link to another web page, website, or anchor on the same web page. The URL can be a symbol- or instance-level button property. You can attach a URL to a selected button instance in the Property inspector or in the URL panel.

You can attach a URL to a symbol, so that the same URL appears in the Link text box in the Property inspector for each instance. This is helpful when entering absolute URLs within a site; you need only complete the last part of the URL in each instance's Link text box in the Property inspector to link the button instances.

Note: For information on absolute versus relative URLs, see [“About absolute and relative URLs” on page 166](#).

To set the URL for a button symbol in the Button Editor:

- 1 Do one of the following to open the button in the Button Editor:
 - Double-click a button instance in the workspace.
 - In the Library panel, double-click the button preview or the symbol icon beside the button symbol.
- 2 Click the Active Area tab in the Button Editor.
- 3 Select the Active Area slice or hotspot.
- 4 Do one of the following:
 - Enter the URL in the Link text box in the Property inspector.
 - Choose a URL from the URL panel.

Note: Changing the URL for a button symbol won't change the URL for existing button instances of that symbol that already have unique URLs assigned to them. This also applies to changes made to a button symbol's target and alt text.

To set the URL for a selected button instance in the workspace, do one of the following:

- Enter the URL in the Link text box in the Property inspector.
- Choose a URL from the URL panel.

Setting the target for a button

The target is the window or frame in which the destination web page appears when a button instance is clicked. If you don't enter a target in the Property inspector, the web page appears in the same frame or window as the link that called it. The target can be a symbol- or instance-level button property. You can set the target for a symbol, so that all instances of the symbol have the same target option.

To set the target for a button symbol in the Button Editor:

- 1 Do one of the following to open the button in the Button Editor:
 - Double-click a button instance in the workspace.
 - In the Library panel, double-click the button preview or the symbol icon beside the button symbol.

2 Do one of the following in the Property inspector:

- Choose a preset target from the Target pop-up menu:

None or **_self** loads the web page into the same frame or window as the link.

blank loads the web page into a new, unnamed browser window.

parent loads the web page into the parent frameset or window of the frame that contains the link.

top loads the web page into the full browser window, removing all frames.

- Enter a target in the Target text box.

Note: Changing the target for a button symbol won't change the target for existing button instances of that symbol that already have unique targets assigned to them. This also applies to changes made to a button symbol's URL and alt text.

To set the target for a button instance in the workspace:

1 Select the button instance in the workspace.

2 Do one of the following in the Property inspector:

- Choose a preset target from the Target pop-up menu:

None or **_self** loads the web page into the same frame or window as the link.

_blank loads the web page into a new, unnamed browser window.

_parent loads the web page into the parent frameset or window of the frame that contains the link.

_top loads the web page into the full browser window, removing all frames.

- Enter a target in the Target text box.

Setting the alternate (alt) text for a button symbol or instance

Alternate (alt) text appears on or near an image placeholder while an image is downloading from the web or in place of an image if it fails to download. It also replaces graphics if the user has the browser set to refrain from displaying images. Alt text can be a symbol- or instance-level button property. You can set alternate text for a button symbol or instance in the Property inspector.

Tip: Applications that assist the visually impaired audibly read the alternate text for graphics on web pages in a browser. For your alternate text, use concise, meaningful descriptions of graphical elements.

To set the alt text for a button symbol in the Button Editor:

1 Do one of the following to open the button in the Button Editor:

- Double-click a button instance in the workspace.
- In the Library panel, double-click the button preview or the symbol icon beside the button symbol.

2 In the Property inspector, enter the text that you wish to appear as alt text in a browser.

Note: Changing the alt text for a button symbol won't change the alt text for existing button instances of that symbol that already have unique alt text assigned to them. This also applies to changes made to a button symbol's target and URL.

To set the alt text for a button instance in the workspace:

- 1 Select the button instance in the workspace.
- 2 Enter the description in the Alt Text box in the Property inspector.

Creating navigation bars

A navigation bar, or nav bar, is a group of buttons that provide links to different areas of a website. It generally remains consistent throughout the site, providing a constant method of navigation, no matter where the user is within the site. The nav bar looks the same from web page to web page, but in some cases, the links may be specific to the function of each page.

In Fireworks, you make a nav bar by creating a button symbol in the Button Editor and then placing instances of that symbol in the workspace.

To create a basic nav bar:

- 1 Create a button symbol. For more information, see [“Creating button symbols” on page 191](#).
- 2 Drag an instance (copy) of the symbol from the Library panel to the workspace.
- 3 Do one of the following to make a copy of the button instance:
 - Select the button instance and choose Edit > Clone.
 - Alt-drag (Windows) or Option-drag (Macintosh) the button instance.
- 4 Shift-drag a button to align it horizontally or vertically. For more precise control, use the arrow keys to move the instance.
- 5 Repeat steps 3 and 4 to create additional button instances.
- 6 Select each instance and assign it unique text, a URL, and other properties using the Property inspector.

Creating pop-up menus

Pop-up menus are displayed in a browser when the user moves a pointer over or clicks a triggering web object, such as a slice or hotspot. You can attach URL links to pop-up menu items for navigation. For example, you can use pop-up menus to organize several navigation options that are related to a button in a nav bar. You can create as many submenu levels as you like in pop-up menus.

Each pop-up menu item appears as an HTML or image cell, which has an Up state, an Over state, and text in both states. To preview a pop-up menu, press F12 to preview it in a browser. The previews in the Fireworks workspace do not display pop-up menus.

About the Pop-up Menu Editor

The Pop-up Menu Editor is a tabbed dialog box that guides you through the creation of a pop-up menu. Its many options for controlling the characteristics of a pop-up menu are organized in four tabs:

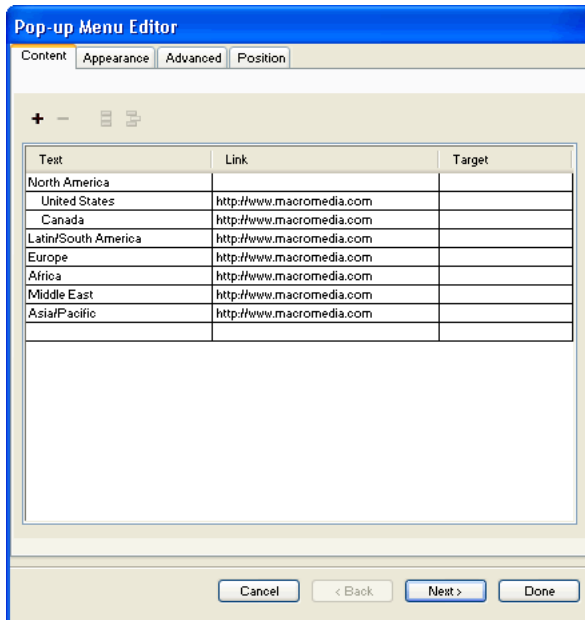
Content has options for determining the basic menu structure, as well as the text, URL link, and target for each menu item.

Appearance contains options that determine the appearance of each menu cell's Up state and Over state, as well as the menu's vertical and horizontal orientation.

Advanced contains options that determine the cell dimensions, padding, and spacing; the cell border width and color; menu delay; and text indentation.

Position contains options that determine the menu and submenu placement:

- The Menu setting places the pop-up menu relative to the slice. Preset positions include bottom, lower right, top, and upper right of a slice.
- The Submenu setting places the pop-up submenu to the right or lower right of the parent menu, or below it.



Depending on the design of the pop-up menu, you may not use all the tabs or options in the Pop-up Menu Editor. You can edit settings in any tab anytime, but you must add at least one menu item in the Content tab to create a menu that you can preview in a browser.

Creating a basic pop-up menu

The Content tab of the Pop-up Menu Editor is where you determine the basic structure and content of the pop-up menu. The current or default settings for the options on the other Pop-up Menu Editor tabs are applied to the menu when you create it.

To create a simple pop-up menu:

- 1 Select a hotspot or slice that will be the trigger area for the pop-up menu.
- 2 Do one of the following to open the Pop-up Menu Editor:
 - Choose Modify > Pop-up Menu > Add Pop-up Menu.
 - Click the behavior handle in the middle of the slice and choose Add Pop-up Menu.
- 3 Click the Content tab if it is not already visible.
- 4 Click the Add Menu button to add an empty menu item.



You can add, delete, and edit cells at any time.

- 5 Double-click each cell and enter or choose the appropriate information:

Text specifies the text for the menu item.

Link determines the URL of the menu item. You can enter a custom link, or choose one from the Link pop-up menu, if any are available. If you've entered URLs for other web objects in the document, those URLs appear in the Link pop-up menu.

Target designates the target for the URL. You can enter a custom target, or choose a preset one from the Target pop-up menu.

Entering content on the last line in the window adds an empty line below it.

Tip: To navigate from an active cell to another cell and continue entering information, press the Tab key to move between cells and the Up Arrow and Down Arrow keys to scroll through the list vertically.

- 6 Repeat steps 4 and 5 until you have added all menu items.
- 7 Optionally, to delete a menu item, highlight it and click the Delete Menu button.
- 8 Do one of the following:
 - Click Next to move to the Appearance tab or choose another tab to continue building the pop-up menu.
 - Create submenu entries for the pop-up menu. For information, see [“Creating submenus within a pop-up menu” on page 203](#).
 - Click Done to complete the pop-up menu by closing the Pop-up Menu Editor.

In the workspace, the hotspot or slice on which you built the pop-up menu displays a blue behavior line attached to an outline of the top level of the pop-up menu.

Note: To view a pop-up menu, you must press F12 to preview it in a browser. The previews in the Fireworks workspace do not display pop-up menus.

Creating submenus within a pop-up menu

Using the Indent Menu and Outdent Menu buttons on the Content tab of the Pop-up Menu Editor, you can create submenus—pop-up menus that appear when the user moves the pointer over or clicks another pop-up menu item. You can create as many levels of submenus as you want.

To create a pop-up submenu:

- 1 Open the Content tab of the Pop-up Menu Editor and create menu items. Create the menu items that you wish to use for the submenu as well, placing them directly under the menu item for which they will be a submenu. For more information, see [“Creating a basic pop-up menu” on page 202](#).

- 2 Click to highlight a pop-up menu item that you wish to make a submenu item.



- 3 Click the Indent Menu button to designate the item as a submenu item under the item directly above it on the menu item list.

- 4 To add the next item to the submenu, highlight it and click Indent Menu.

All items that are contiguously indented at the same level constitute a single pop-up submenu.

- 5 Optionally, highlight a menu or submenu item and click Add Menu to insert a new item just below the highlighted item.

- 6 Do one of the following:

- Click Next to move to the next tab or choose another tab to continue building the pop-up menu.
- Click Done to close the Pop-up Menu Editor.

To create a pop-up submenu within a pop-up submenu:

- 1 Highlight a submenu item in the Content tab of the Pop-up Menu Editor. For more information, see the previous procedure.
- 2 Click the Indent Menu button to indent it again, so that it is indented from the submenu item directly above it.

You can continue indenting to create as many levels of nested submenus as you want.

To move a menu item into a higher-ranking submenu or into the main pop-up menu:

- 1 Highlight the menu item in the Content tab of the Pop-up Menu Editor.



- 2 Click the Outdent Menu button.

For more information about positioning submenus, see [“Positioning pop-up menus and submenus” on page 208](#).

- 3 Do one of the following to complete the pop-up menu or continue building it:

- Click Next to move to the Appearance tab or choose another tab to continue building the pop-up menu.
- Click Done to close the Pop-up Menu Editor.

In the workspace, the hotspot or slice on which you built the pop-up menu displays a blue behavior line attached to an outline of the top level of the pop-up menu.

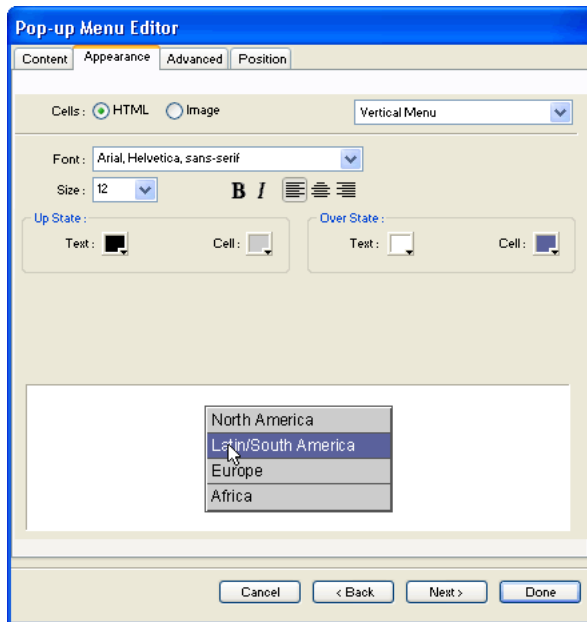
Note: To view a pop-up menu, press F12 to preview it in a browser. The previews in the Fireworks workspace do not display pop-up menus.

To move an entry in the pop-up menu:

- 1 With the desired pop-up menu displayed in the Pop-up Menu Editor, click the Content tab.
- 2 Drag the menu item to a new location in the list.
- 3 Click Done.

Designing the appearance of a pop-up menu

After you create a basic menu and optional submenus, you can format the text, apply graphic styles to the Over and Up states, and choose vertical or horizontal orientation in the Appearance tab of the Pop-up Menu Editor.



To set the orientation of a pop-up menu:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Appearance tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).
- 2 Choose Vertical or Horizontal from the Orientation pop-up menu.

To set whether a pop-up menu is HTML- or image-based:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Appearance tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).

- 2 Choose a Cells option:

HTML sets the menu’s appearance using HTML code only. This setting produces pages with smaller file sizes.

Image gives you a selection of graphic image styles to use as the cell background. This setting produces pages with larger file sizes.

Note: You can add to this selection of styles by creating custom pop-up menu styles. For more information, see [“Adding pop-up menu styles” on page 206](#).

To format text in the current pop-up menu:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Appearance tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).

- 2 Choose a preset size from the Size pop-up menu or enter a value in the Size text box.

Note: When cell width and height are set to Automatic in the Advanced tab of the Pop-up Menu Editor, text size determines the size of graphics associated with the menu item.

- 3 Choose a system font group from the Font pop-up menu or enter the name of a custom font.

Note: Be careful when choosing a font. If users who will view your web page don’t have the font you choose installed on their system, a replacement font will be displayed in their web browser.

- 4 Optionally, click a text style button to apply a bold or italic style.
- 5 Click a justification button to align text to the left or right or center it.
- 6 Choose a text color from the Text Color box.

To set the appearance of the menu cells:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Appearance tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).

- 2 Choose the text and cell colors for each state.

- 3 If Image is selected as the cell type, choose a graphical style for each state.

- 4 Do one of the following:

- Click Next to move to the Advanced tab or choose another tab to continue building the pop-up menu.
- Click Done to close the Pop-up Menu Editor.

In the workspace, the hotspot or slice on which you built the pop-up menu displays a blue behavior line attached to an outline of the top level of the pop-up menu.

Note: To view a pop-up menu, press F12 to preview it in a browser. The previews in the Fireworks workspace do not display pop-up menus.

Adding pop-up menu styles

You can add custom cell styles to the Pop-up Menu Editor. Custom cell styles are available along with the preset choices on the Appearance tab when you choose the Image option as the cell type, which sets pop-up menus to use graphical backgrounds in their cells.

To add a custom cell style to the Pop-up Menu Editor:

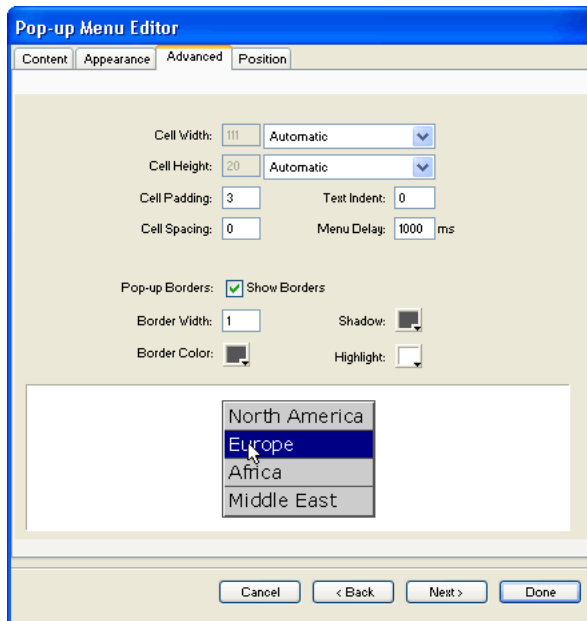
- 1 Apply any combination of stroke, fill, texture, and Live Effects to an object, and save it as a style using the Styles panel. For more information, see [“Creating and deleting styles” on page 156](#).
- 2 Select the new style in the Styles panel, and then choose Export Style from the Styles panel Options menu.
- 3 Navigate to the Nav Menu folder on your hard disk, rename the style file if you wish, and click Save.

Note: The exact location of the Nav Menu folder varies depending on your operating system. For more information, see [“Working with configuration files” on page 286](#).

When you return to the Appearance tab of the Pop-up Menu Editor and choose the Image Cell background option, the new style is available along with the preset styles for the Up and Over states of the pop-up menu cells.

Setting advanced pop-up menu properties

The Advanced tab of the Pop-up Menu Editor offers additional settings to control cell size, padding, and spacing; text indentation; menu disappearance delay; and border width, color, shadow, and highlight.

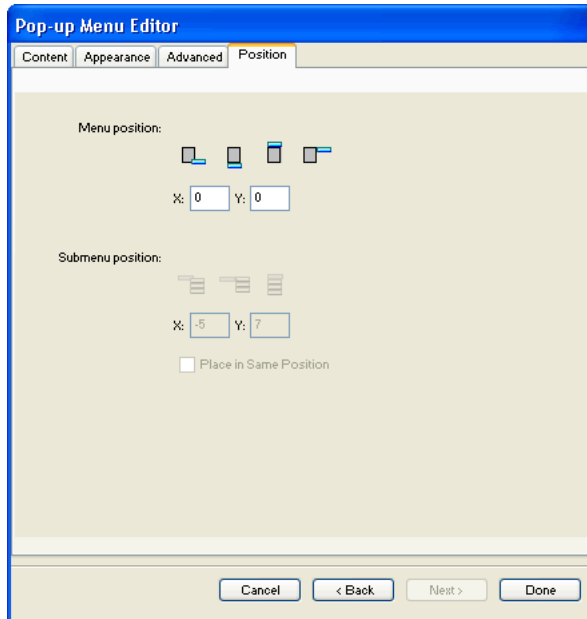


To set advanced cell properties for the current pop-up menu:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Advanced tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).
- 2 Choose a width or height constraint from the Automatic/Pixels pop-up menu:
Automatic forces the cell height to conform to the text size set in the Appearance tab of the Pop-up Menu Editor and the cell width to conform to the menu item that contains the longest text.
Pixels allows you to enter specific measurements in pixels in the Cell Width and Cell Height text boxes.
- 3 Enter a value in the Cell Padding text box to determine the distance between pop-up menu text and the edge of the cell.
- 4 Enter a value in the Cell Spacing text box to set the amount of space between menu cells.
- 5 Enter a value in the Text Indent text box to set the amount of indentation for pop-up menu text.
- 6 Enter a value in the Menu Delay text box to set the amount of time in milliseconds that the menu remains visible after the pointer is moved away from it.
- 7 Set pop-up border properties:
Show Borders allows you to show or hide pop-up menu borders. If this option is not selected, the following options are disabled.
Border Width sets the width of the pop-up menu border.
Border Color, Shadow, and Highlight allow you to modify the color of pop-up menu borders.
Note: Many of these options are disabled if the Image Cell type is selected on the Appearance tab.
- 8 Do one of the following to complete the pop-up menu or continue building it:
 - Click Next to move to the Position tab or choose another tab to continue building the pop-up menu.
 - Click Done to close the Pop-up Menu Editor. In the workspace, the hotspot or slice on which you built the pop-up menu displays a blue behavior line attached to an outline of the top level of the pop-up menu.
Note: To view a pop-up menu, press F12 to preview it in a browser. The previews in the Fireworks workspace do not display pop-up menus.

Positioning pop-up menus and submenus

The Position tab of the Pop-up Menu Editor lets you specify a pop-up menu's position. You can also position a top-level pop-up menu by dragging its outline in the workspace when the Web Layer is visible.



To set the position for a pop-up menu using the Pop-up Menu Editor:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Position tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).
- 2 Do one of the following to define the menu position:
 - Click a Position button to position the pop-up menu relative to the slice that triggers it.
 - Enter x and y coordinates. Coordinates of 0,0 align the upper left corner of the pop-up menu with the upper left corner of the slice or hotspot that triggers it.
- 3 Do one of the following:
 - If you have submenus, position them as described in the next procedure.
 - Click Back to modify properties on other tabs.
 - Click Done to close the Pop-up Menu Editor.

To set the position for a pop-up submenu using the Pop-up Menu Editor:

- 1 With the desired pop-up menu open in the Pop-up Menu Editor, click the Position tab.
For information on opening an existing pop-up menu in the Pop-up Menu Editor, see [“Editing pop-up menus” on page 209](#).
- 2 Do one of the following to define the submenu position:
 - Click a Submenu Position button to position the submenu relative to the pop-up menu item that triggers it.
 - Enter x and y coordinates. Coordinates of 0,0 align the upper left corner of the pop-up submenu with the upper right corner of the menu or menu item that triggers it.
- 3 Do one of the following:
 - To make each submenu’s position relative to the parent menu item that triggers it, deselect the Place in Same Position option for the submenu position.
 - To make each submenu’s position relative to the parent pop-up menu, select Place in Same Position.
- 4 Click Done to close the Pop-up Menu Editor or click Back to modify properties on other tabs.

To set the position for a pop-up menu by dragging it:

- 1 If necessary, do one of the following to display the Web Layer:
 - Click the Show Slices and Hotspots button in the Tools panel.
 - Click the Eye column in the Layers panel.
- 2 Select the web object that is the trigger for the pop-up menu.
- 3 Drag the pop-up menu outline to another location in the workspace.

Editing pop-up menus

In the Pop-up Menu Editor, you can edit or update the contents of a pop-up menu, rearrange the menu items, or change other properties on any of the four tabs.

To edit a pop-up menu in the Pop-up Menu Editor:

- 1 If necessary, do one of the following to display the Web Layer:
 - Click the Show Slices and Hotspots button in the Tools panel.
 - Click the Eye column in the Layers panel.
- 2 Select the slice to which the pop-up menu is attached.
- 3 Double-click the pop-up menu’s blue outline in the workspace.
The Pop-up Menu Editor opens with your pop-up menu entries displayed.
- 4 Make the desired modifications on any of the four tabs and click Done.

To change a pop-up menu entry:

- 1 With the desired pop-up menu displayed in the Pop-up Menu Editor, click the Content tab.
- 2 Double-click the Text, Link, or Target text boxes and edit the menu text.
- 3 Click outside the entry list to apply the change.
- 4 Click Done.

To move an entry in the pop-up menu:

- 1 With the desired pop-up menu displayed in the Pop-up Menu Editor, click the Content tab.
- 2 Drag the menu item to a new location in the list.
- 3 Click Done.

About exporting pop-up menus

Fireworks generates all the JavaScript necessary to view pop-up menus in web browsers. When a Fireworks document containing pop-up menus is exported to HTML, a JavaScript file called `mm_menu.js` is exported to the same location as the HTML file.

When you upload your files, you should upload `mm_menu.js` to the same directory location as the web page containing the pop-up menu. If you want to post the file to a different location, you must update the hyperlink referencing `mm_menu.js` in the Fireworks HTML code to reflect the custom location. If your document contains several pop-up menus, or you have several documents with pop-up menus, Fireworks does not create extra `mm_menu.js` files; only a single file is used for all menus in all documents.

When you include submenus, Fireworks generates an image file called `arrows.gif`. This image is the tiny arrow that appears next to a menu entry that tells users a submenu exists. No matter how many submenus a document contains, Fireworks always uses the same `arrows.gif` file.

For more information about exporting HTML and JavaScript, see [“Exporting HTML” on page 252](#).

CHAPTER 11

Creating Animation

Animated graphics add an exciting, sophisticated look to your website. In Macromedia Fireworks MX 2004, you can create animated graphics with banner ads, logos, and cartoons that move. For example, you can make your company mascot dance across a page while the logo fades in and out.

One way to create animations in Fireworks is by creating symbols and changing their properties over time to produce the illusion of motion. A symbol is like an actor whose movements you choreograph. The action of each symbol is stored in a frame. When you play all the frames together in a sequence, you get animation.

You can apply different settings to the symbol to gradually change the content of successive frames. You can make a symbol appear to move across the canvas, fade in or out, get bigger or smaller, or rotate.

Because you can have multiple symbols in a single file, you can create a complex animation in which different types of action occur all at once.

The Optimize panel lets you set optimization and export settings to control how your file is created. Fireworks can export animations as animated GIF or Flash SWF files. You can also import Fireworks animations directly into Macromedia Flash for further editing.

Building animation

In Fireworks, you can create animation by assigning properties to objects called *animation symbols*. The animation of a symbol is broken down into *frames*, which contain the images and objects that make up each step of the animation. You can have more than one symbol in an animation, and each symbol can have a different action. Different symbols can contain differing numbers of frames. The animation ends when all the action of all the symbols is complete.

To build an animation using animation symbols in Fireworks:

- 1 Create an animation symbol, either by creating a symbol from scratch or by converting an existing object into a symbol. For more information, see [“Creating animation symbols” on page 212](#).
- 2 Use the Property inspector or the Animate dialog box to enter settings for the animation symbol. You can set the degree and direction of movement, scaling, opacity (fading in or out), and angle and direction of rotation. For more information, see [“Editing animation symbols” on page 213](#).

Note: Degree and direction of movement options are found only in the Animate dialog box.

- 3 Use the Frame Delay controls in the Frames panel to set the speed of the animated motion. For more information, see [“Setting the frame delay” on page 216](#).
- 4 Optimize the document as an animated GIF. For more information, see [“Optimizing an animation” on page 222](#).
- 5 Export the document as an Animated GIF or SWF, or save it as a Fireworks PNG and import it into Macromedia Flash for further editing. For more information, see [“Animation export formats” on page 223](#).

Working with animation symbols

Animation symbols perform the action in your Fireworks file like actors in a movie. For example, in an animation of three geese flying across the sky, each goose is a cast member.

An animation symbol can be any object you create or import, and you can have many symbols in one file. Each symbol has its own properties and animates independently. So you can create symbols that move across the screen while others fade or shrink.

You do not need to use symbols for every aspect of your animation. However, using symbols and instances for graphics that appear in multiple frames keeps your animation file size smaller, in addition to the other advantages discussed in this chapter.

You can change animation symbol properties at any time using the Animate dialog box or the Property inspector. You can also edit symbol artwork in the Symbol Editor. The Symbol Editor lets you edit your symbol without affecting the rest of the document. You can also change a symbol's motion by moving its motion path.

Because animation symbols are automatically placed in the library, you can reuse them to create other animations.

Creating animation symbols

After you create an animation symbol, you can set properties that determine the number of frames in the animation and the type of action, such as scaling or rotation. By default, a new animation symbol has five frames, each with a delay time of 0.07 seconds.

To create an animation symbol:

- 1 Choose Edit > Insert > New Symbol.
- 2 In the Symbol Properties dialog box, enter a name for the new symbol.
- 3 Choose Animation and click OK.
- 4 In the Symbol Editor, use the drawing or text tools to create a new object.
You can draw either vector or bitmap objects.
- 5 Close the Symbol Editor window.

Fireworks places the symbol in the library and a copy in the center of the document.

You can add new frames to the symbol using the Frames slider in the Property inspector. Choose Window > Properties to open the Property inspector, if it's not already open.

To convert an object to an animation symbol:

- 1 Select the object.
- 2 Choose Modify > Animation > Animate selection.
- 3 Enter the desired settings in the dialog box. For more information on settings, see [“Editing animation symbols” on page 213](#).

Animation controls appear on the object’s bounding box, and a copy of the symbol is added to the library.

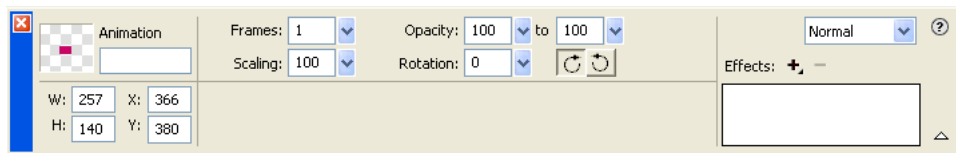
Editing animation symbols

You can manipulate the properties of animation symbols to make your website come alive. You can change a variety of properties in a symbol, from the animation speed to the opacity and rotation. By manipulating these properties, you can make a symbol appear to rotate, speed up, fade in and out, or any combination of these.

A key property for any animation symbol is number of frames. This property determines how many steps it takes the symbol to complete its animation. When you set the number of frames for a symbol, Fireworks automatically adds the required number of frames to the document to complete the action. If the symbol requires more frames than currently exist in the animation, Fireworks asks if you want to add extra frames.

Changing animation properties

You can change animation properties using either the Animate dialog box or the Property inspector.



Animation symbol properties in the Property inspector

You can edit any of the following properties for an animation symbol:

Frames is the number of frames you want to include in the animation. Although the slider limits you to a maximum of 250, you can enter any number you wish in the Frames text box. The default is 5.

Move is the distance, in pixels, that you want each object to move. This option is available only in the Animate dialog box. Although the default is 72, you can enter any number you wish in the Move text box. Movement is linear, and there are no keyframes (unlike in Macromedia Flash and Director).

Direction is the direction, in degrees, in which you want the object to move. Values range from 0 to 360°. This option is available only in the Animate dialog box.

You can also change Movement and Direction values by dragging the object’s animation handles (see [“Editing symbol motion paths” on page 215](#)).

Scaling is the percent change in size from start to finish. Although the default is 100%, you can enter any number you wish in the Scaling text box. To scale an object from 0 to 100%, the original object must be very small; vector objects are recommended.

Opacity is the degree of fading in or out from start to finish. Values range from 0 to 100, and the default is 100%. Creating a fade in/fade out requires two instances of the same symbol—one to play the fade in, and the other to play the fade out.

Rotation is the amount, in degrees, that the symbol rotates from start to finish. Values range from 0 to 360°. You can enter higher values for more than one rotation. The default is 0°.

CW and CCW indicate the direction in which the object rotates. CW indicates clockwise and CCW indicates counterclockwise rotation.

To change animation symbol properties:

- 1 Select an animation symbol.
- 2 Choose Modify > Animation > Settings to open the Animate dialog box or Window > Properties to open the Property inspector if it is not already open.
- 3 Change the desired properties.
- 4 If you're using the Animate dialog box, click OK to accept the changed properties.

Removing animations

You can remove animations either by deleting the animation symbol from the library or by removing the animation from the symbol.

To remove a symbol from the library:

- 1 In the Library panel, select the animation symbol you want to remove.
- 2 Drag the symbol to the trash can icon in the lower right corner.

To remove the animation from a selected animation symbol:

- Choose Modify > Animation > Remove Animation.

The symbol becomes a graphic symbol and is no longer animated. If you later convert the symbol back into an animation symbol, the previous animation settings return.

Editing symbol graphics

You can change the graphic your symbol is based on as well as its properties. You edit symbol graphics in the Symbol Editor. The Symbol Editor lets you use any of the drawing, text, or color tools to edit the graphic. While you're working in the Symbol Editor, only the selected symbol is affected.

The symbol is a library item. Thus, if you change the appearance of one of its instances, all the other instances change as well.

To change a selected symbol's graphic attributes:

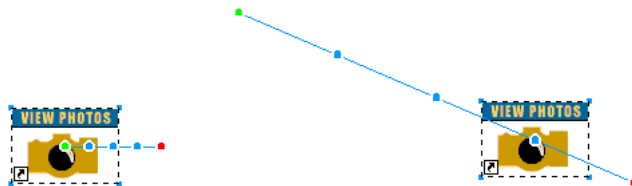
- 1 Do one of the following to open the Symbol Editor:
 - Double-click the symbol object.
 - Choose Modify > Symbol > Edit Symbol.
 - Click the Edit button in the Animate dialog box.
- 2 Modify the animation symbol and change any text, strokes, fills, and effects as appropriate.
- 3 Close the Symbol Editor.

Editing symbol motion paths

When you select an animation symbol, it has a unique bounding box and a motion path attached that indicates the direction in which the symbol moves.

The green dot on the motion path indicates the starting point, and the red dot shows the end point. The blue points on the path represent frames. For example, a symbol with five frames would have one green dot, three blue dots, and one red dot on its path. The position of the object on the path indicates the current frame. So, if the object appears at the third dot, Frame 3 is the current frame.

You can change the direction of the motion by changing the angle of the path.

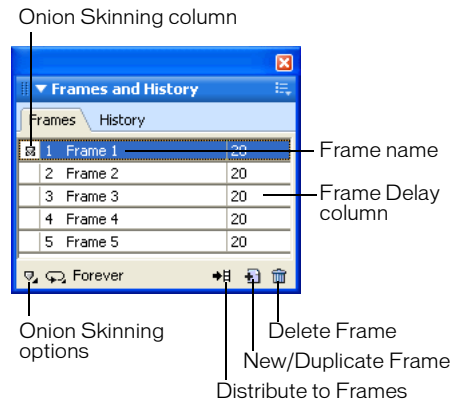


To change movement or direction:

- Drag one of the symbol's animation start or end handles to a new location. The green point indicates the starting point; the red indicates the ending point.
Shift-drag to constrain the direction of movement to 45° increments.

Working with frames

You build animations by creating a number of frames. You can see the contents of each frame using the Frames panel. The Frames panel is where you create and organize frames. You can name the frames, reorganize them, manually set the timing of the animation, and move objects from one frame to another.



Each frame also has a number of associated properties. By setting the frame delay or hiding a frame, you can make your animation look the way you want during the building and editing process.

Setting the frame delay

The frame delay determines how long the current frame is displayed. It is specified in hundredths of a second. For example, a setting of 50 displays the frame for half a second, and a setting of 300 displays it for three seconds.

To set the frame delay value:

- 1 Select one or more frames:
 - To select a contiguous range of frames, Shift-click the first and last frame names.
 - To select a noncontiguous range of frames, hold down Control (Windows) or Command (Macintosh) and click each frame name.
- 2 Do one of the following:
 - Choose Properties from the Frames panel Options menu.
 - Double-click the frame delay column.

The Frame Properties pop-up window appears.
- 3 Enter a value for the frame delay.
- 4 Press Enter, or click outside the panel to close the pop-up window.

Showing and hiding frames for playback

You can show or hide frames for playback. If a frame is hidden, it is not displayed during playback and it is not exported.

To show or hide a frame:

- 1 Do one of the following:
 - Choose Properties from the Frames panel Options menu.
 - Double-click the frame delay column.The Frame Properties pop-up window appears.
- 2 Deselect Include when Exporting.
A red X is displayed in place of the frame delay time.
- 3 Press Enter or click outside the Frame Properties pop-up window to close it.

Naming animation frames

As you set up an animation, Fireworks creates the appropriate number of frames and displays them in the Frames panel. By default the frames are named Frame 1, Frame 2, and so on. When you move a frame in the panel, Fireworks renames each one to reflect the new order.

It's a good idea to name your frames for easy reference and to keep track of them. That way you always know which frame contains which part of the animation. Moving a renamed frame has no effect on the name; it remains the same.

To change a frame's name:

- 1 In the Frames panel, double-click the frame's name.
- 2 In the pop-up text box, type a new name and press Enter.

Adding, moving, copying, and deleting frames

You can add, copy, delete, and change the order of frames in the Frames panel.

To add a new frame:



- Click the New/Duplicate Frame button at the bottom of the Frames panel.

To add frames to a specific place in the sequence:

- 1 Choose Add Frames from the Frames panel Options menu.
- 2 Enter the number of frames to add.
- 3 Choose where to insert the frames: before the current frame, after it, or at the beginning or end. Then click OK.

To make a copy of a frame:

- Drag an existing frame to the New/Duplicate Frame button at the bottom of the Frames panel.

To copy a selected frame and place it in a sequence:

- 1 Choose Duplicate Frame from the Frames panel Options menu.
- 2 Enter the number of duplicates to create for the selected frame, choose where the duplicate frames are to be inserted, and click OK.

Duplicating a frame is useful when you want objects to reappear in another part of the animation.

To reorder frames:

- Drag the frames one by one to a new location in the list.

To delete the selected frame, do one of the following:

- Click the Delete Frame button in the Frames panel.
- Drag the frame to the Delete Frame button.
- Choose Delete Frame from the Frames panel Options menu.

Moving selected objects in the Frames panel

You can use the Frames panel to move objects to a different frame. Objects that appear in only a single frame appear to vanish as the animation plays. You can move objects to make them appear or disappear at different points in the movie.

To move a selected object to a different frame:

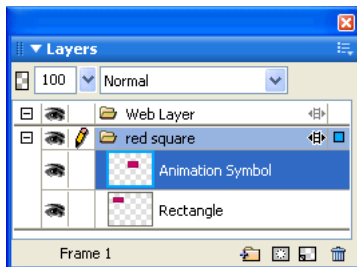
- In the Frames panel, drag the selection indicator (the small blue square at the right of the frame delay time) to the new frame.

Sharing layers across frames

Layers divide a Fireworks document into discrete planes, like separate tracing paper overlays. With animations, you can use layers to organize objects that are part of the scenery or backdrop for the animation. This gives you the convenience of being able to edit objects on one layer so that they don't affect the rest of your animation. For more information, see [“Working with layers” on page 129](#).

If you want objects to appear throughout an animation, you can place them on a layer and then use the Layers panel to share the layer across frames. When a layer is shared across frames, all objects on that layer are visible in every frame.

You can edit objects on shared layers from any frame; those edits are reflected in all other frames.



In this example, the red square layer is shared across frames.

To share a layer across frames:

- 1 Double-click the layer.
- 2 Select Share Across Frames.

Note: All the contents in a shared layer appear in every frame.

To disable the sharing of a layer across frames:

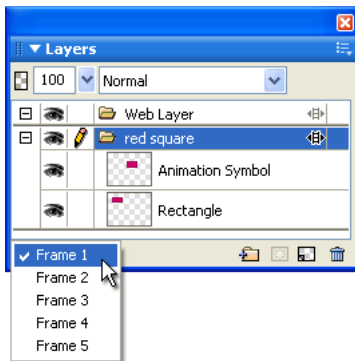
- 1 Double-click the shared layer.
- 2 Deselect Share Across Frames.
- 3 Choose one of the following options for how to copy objects to frames:
 - Leave the contents of the shared layer in the current frame only.
 - Copy the contents of the shared layer to all frames.

Viewing objects in a specific frame

You can easily view objects in a specific frame using the Frame pop-up menu in the Layers panel.

To view objects in a specific frame:

- Choose the desired frame from the Frame pop-up menu at the bottom of the Layers panel.



All objects in the selected frame are listed in the Layers panel and displayed on the canvas.

Using onion skinning

Onion skinning lets you view the contents of frames preceding and following the currently selected frame. You can smoothly animate objects without having to flip back and forth through them. The term *onion skinning* comes from a traditional animation technique of using thin, translucent tracing paper to view animated sequences.

When onion skinning is turned on, objects in frames before or after the current frame are dimmed so that you can distinguish them from objects in the current frame.

By default, Multi-Frame Editing is enabled, which means you can select and edit dimmed objects in other frames without leaving the current frame. You can use the Select Behind tool to select objects in frames in sequential order.

To adjust the number of frames visible before and after the current frame:

- 1 In the Frames panel, click the Onion Skinning button.
- 2 Choose a display option:

No Onion Skinning turns off onion skinning and displays only the contents of the current frame.

Show Next Frame displays the contents of the current frame and the next frame.

Before and After displays the contents of the current and adjacent frames.

Show All Frames displays the contents of all frames.

Custom sets a custom number of frames and controls the opacity of onion skinning.

Multi-Frame Editing lets you select and edit all visible objects. Deselect this option to select and edit only objects in the current frame.

Tweening

Tweening is a traditional animation term that describes the process in which a lead animator draws only the keyframes (frames containing major changes) while assistants draw the frames in between.

In Fireworks, tweening blends two or more instances of the same symbol, creating interim instances with interpolated attributes. Tweening is a manual process useful for more sophisticated movement of an object across the canvas and for objects whose Live Effects change in each frame of the animation.

For example, you can tween an object so that it seems to move along a linear path.

To tween instances:

- 1 Select two or more instances of the same graphic symbol on the canvas. Do not select instances of different symbols.
- 2 Choose Modify > Symbol > Tween Instances.
- 3 Enter the number of tween steps to be inserted between the original pair in the Tween Instances dialog box.

- 4 To distribute the tweened objects to separate frames, choose Distribute to Frames and click OK.



If you choose not to distribute the objects to separate frames, you can do it later by selecting all instances and clicking the Distribute to Frames button in the Frames panel.

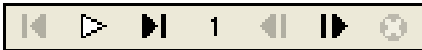
Note: In most cases, using animation symbols is preferable to tweening. For more information, see “Working with animation symbols” on page 212.

Previewing an animation

You can preview an animation while you are working on it to check its progress. You can also preview an animation after optimization to see how it will look in a web browser.

To preview an animation in the workspace:

- Use the frame controls that appear at the bottom of the Document window.



Frame controls

Keep the following in mind when previewing animations:

- To set how long each frame appears in the Document window, enter frame delay settings in the Frames panel.
- Frames excluded from the export do not appear in the preview.
- Previewing the animation in the Original view displays the full-resolution source graphic, not the optimized preview used for the exported file.

To preview an animation in Preview view:

- 1 Click the Preview button at the upper left of the Document window.
- 2 Use the frame controls.

Note: Previewing animations in 2-Up or 4-Up view is not recommended.

To preview an animation in a web browser:

- Choose File > Preview in Browser, and choose a browser from the submenu.

Note: Animated GIF must be selected as the Export file format in the Optimize panel, or no motion will be visible when you preview the document in your browser. This is required even if you plan to import your animation into Flash as a SWF or Fireworks PNG file.

Exporting your animation

After you set up the symbols and frames that make up your animation, you are ready to export the file as an animation. Before you export the files, you need to enter a few settings to make your animation load more easily and play more smoothly. You can set playback settings like looping and transparency and then use optimization to make your exported file smaller and easier to download.

Note: If you plan to import your animation into Macromedia Flash for further editing, you do not need to export it. Flash can directly import Fireworks PNG source files. For more information, see “Working with Macromedia Flash MX 2004” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

Setting the animation repetition

The Loop setting in the Frames panel determines how many times the animation repeats. This feature loops frames over and over so you can minimize the number of frames needed to build the animation.

To set the selected animation to repeat:

- 1 Choose Window > Frames to display the Frames panel.
 - 2 Click the GIF Animation Looping button at the bottom of the panel.
 - 3 Choose the number of times to repeat the animation after the first time.
- If you choose 4, for example, the animation plays five times in all. Forever repeats the animation continuously.

Setting transparency

As part of the optimization process, you can have one or more colors in an animated GIF be displayed as transparent in a web browser. This is useful when you want a web page background color or image to show through the animation.

To display a color as transparent in a web browser:

- 1 Choose Window > Optimize if the Optimize panel is not visible.
- 2 From the Transparency pop-up menu in the Optimize panel, choose either Index Transparency or Alpha Transparency. For a description of these options, see [“Making areas transparent” on page 241](#).
- 3 Use the transparency tools in the Optimize panel to select colors for transparency.



Optimizing an animation

Optimization compresses your file into the smallest package for fast loading and exporting, making downloading time much quicker on your website.

To optimize an animation:

- 1 If you plan to export your animation as an animated GIF, choose Animated GIF as the Export file format in the Optimize panel.
If the panel is not visible, choose Window > Optimize.
- 2 Set the Palette, Dither, or Transparency options. For more information on optimizing options, see [“Optimizing GIF, PNG, TIFF, BMP, and PICT files” on page 235](#).
- 3 In the Frames panel, set the frame delay. For more information, see [“Setting the frame delay” on page 216](#).

Animation export formats

After you create and optimize an animation, it is ready to export.

Animated GIFs give the best results for clip art and cartoonlike graphics. For information about exporting animated GIFs, see “Exporting an animation” on page 250.

You can export the animation as a Flash SWF file, and then import it into Macromedia Flash. Or you can skip the export step and import your Fireworks PNG source file directly into Flash. This option gives you the most control over how your animation is imported. You can import all layers and frames of your animation if desired, and then further edit them within Flash. For more information, see “Working with Macromedia Flash MX 2004” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks.

You can also export frames or layers from your animations as multiple files. This can be useful when you have many symbols on different layers for the same object. For example, you can export a banner ad as multiple files if each letter of a company name is animated in a graphic. Each letter is separate from the others. For more information about exporting layers or frames to multiple files, see “Exporting frames or layers” on page 251.

Working with existing animations

You can use an existing animated GIF file as part of your Fireworks animation. There are two ways of using the file: you can import the GIF into an existing Fireworks file, or you can open the GIF as a new file.

When you import an animated GIF, Fireworks converts it to an animation symbol and places it in the currently selected frame. If the animation has more frames than the current movie does, you can choose to automatically add more frames.

Imported GIFs lose their original frame delay settings and assume the frame delay of the current document. Because the imported file is an animation symbol, you can apply additional motion to it. For example, you can import an animation of a man walking in place and then apply direction and motion properties to have the man walk across the screen.

When you open an animated GIF in Fireworks, a new file is created and each frame in the GIF is placed in a separate frame. Although the GIF is not an animation symbol, it does retain all the frame delay settings from the original file.

After the file is imported, you need to set its file format to Animated GIF to export the motion from Fireworks.

To import an animated GIF:

- 1 Choose File > Import.
- 2 Locate the file and click Open.
- 3 Click Yes to add additional frames to your animation.

If you click Cancel, only the first frame of the animated GIF is displayed. Although the whole document is imported, you must add additional frames to view it.

To open an animated GIF:

- Choose File > Open and locate the GIF file.

Using multiple files as one animation

Fireworks can create an animation based on a group of image files. For example, you can create a banner ad based on several existing graphics by opening each graphic and placing it in a separate frame in the same document.

To open multiple files as an animation:

- 1 Choose File > Open.
- 2 Shift-click to select multiple files.
- 3 Select Open as Animation and click OK.

Fireworks opens the files in a new single document, placing each file in a separate frame in the order in which you selected it.

CHAPTER 12

Optimizing and Exporting

The ultimate goal in web graphic design is to create great-looking images that download as fast as possible. To do that, you must select a file format with the best compression for your image while maintaining as much quality as possible. This balancing act is *optimization*—finding the right mix of color, compression, and quality.

Exporting graphics from Macromedia Fireworks MX 2004 is a two-step process:

- First, you prepare a document or individual sliced graphics for export by choosing optimization settings and comparing previews to determine an acceptable balance between quality and file size.
- Second, you export (or in some cases, save) the document or individual sliced graphics using export settings suitable for their destination on the web or elsewhere.

If you are new to optimizing and exporting web graphics, you can use the Export Wizard. The wizard guides you through the export process and suggests settings. It also displays the Export Preview, where you can optimize a document as part of the export process.

If you are comfortable with the tasks of optimizing and exporting graphics, you'll want to use the other tools available in Fireworks for optimizing and exporting. For optimizing, you use the Optimize panel and the preview buttons in the Document window. They offer you greater control over the optimization process. For exporting, you use the Export dialog box or the Quick Export button. In some cases, you can simply save the graphic without exporting. For more information, see Fireworks Help.

The Quick Export button makes exporting graphics for use in other applications easy by automatically setting the appropriate options in the Export dialog box for you. If you use Fireworks with other applications, the Quick Export button can simplify your design workflow.

About optimizing

Optimizing graphics in Fireworks involves doing the following:

- Choosing the best file format. Each file format has a different method of compressing color information. Choosing the appropriate format for certain types of graphics can greatly reduce file size.
- Setting format-specific options. Each graphic file format has a unique set of options. You can use options such as color depth to reduce file size. Some graphic formats such as GIF and JPEG also have options for controlling image compression.
- Adjusting the colors in the graphic (for 8-bit file formats only). You can limit colors by confining the image to a specific set of colors called a color palette. Then you trim unused colors from the color palette. Fewer colors in the palette means fewer colors in the image, which results in a smaller file size for palette image file types.

You should experiment with all optimization controls to find the best balance of quality and size.

Using the Export Wizard

You can use the Export Wizard if you are new to optimizing and exporting web graphics. Using the Export Wizard, you can easily export graphics without understanding the details of optimizing and exporting.

The Export Wizard takes you step by step through the optimization and export process. Answer questions about the file destination and intended use, and the Export Wizard suggests file type and optimization settings.

If you prefer to optimize to a target file size, the Export Wizard optimizes the exported file to fit within the size constraint you set.

Once you are more comfortable with optimizing and exporting, you'll want to use the Optimize panel and the preview buttons in the Document window to optimize graphics. They are more convenient than the Export Wizard and offer more optimization control for users who are familiar with the optimization process. After you optimize graphics in this manner, you must perform an additional step to export (or in some cases, save) the graphics. For more information on exporting, see [“Optimizing in the workspace” on page 231](#) or [“Exporting from Fireworks” on page 247](#). For more information on saving, see Fireworks Help.

To export a document using the Export Wizard:

- 1 Choose File > Export Wizard.
- 2 Answer any questions that appear and click Continue in each panel.
Fireworks makes recommendations about file formats.

Tip: Choose Target Export File Size in the first panel to optimize to a maximum file size.

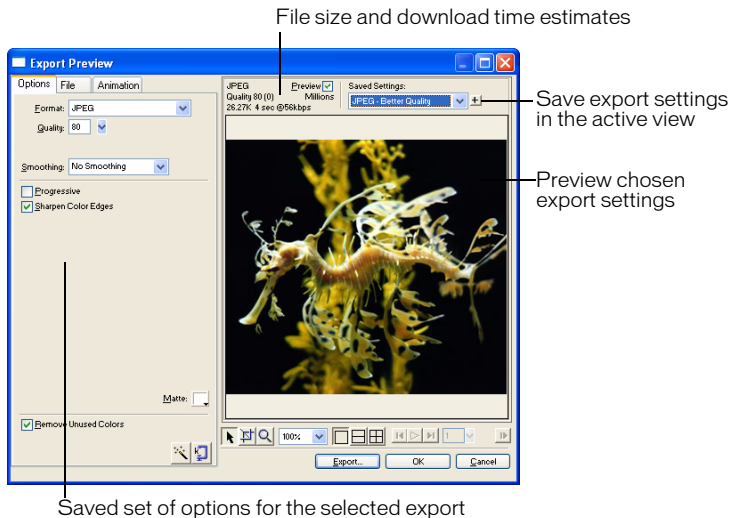
- 3 Click Exit in the Analysis Results window of the wizard.

The Export Preview opens with recommended export options. For more information, see [“Using Export Preview” on page 227](#).

Using Export Preview

When accessed through the Export Wizard, the Export Preview displays recommended optimization and export options for the current document. When selected directly from the File menu, the Export Preview displays the current document export settings as defined in the optimize panel.

The preview area of the Export Preview displays the document or graphic exactly as it will be exported and estimates file size and download time with the current export settings.





You can use split views to compare various settings to find the smallest file size that maintains an acceptable level of quality. You can also constrain the file size using the Optimize to Size wizard.

When you export animated GIFs or JavaScript rollovers, the estimated file size represents the total size across all frames.

Note: To increase redraw speed of the Export Preview, deselect Preview. To stop the redraw of the preview area when changing settings, press Escape.

To export using Export Preview:

- 1 Choose File > Export Preview to open the Export Preview.
 - To edit optimization settings, click the Options tab. For information about the options available on this tab, see the following procedures.
 - To edit the size and area of the exported image, click the File tab and change the desired settings. For information about the options available on this tab, see the following procedures.
 - To edit animation settings for the image, click the Animation tab and change the desired settings. For information about the options available on this tab, see the following procedures.
- 2  Use the Zoom button at the bottom of the dialog box to zoom in or out in the preview. Click this button to activate the Zoom magnification tool and then click in the preview to magnify the preview. Alt-click (Windows) or Option-click (Macintosh) the button in the preview to zoom out.
- 3 Do one of the following to pan the preview area:
 -  Click the Pointer button at the bottom of the dialog box and drag in the preview.
 - Hold down the Spacebar when the Zoom pointer is active and drag in the preview.
- 4 Click a split-view button to divide the preview area into two or four previews to compare settings.



Each preview window can display a preview of the graphic with different export settings.

Note: When you zoom or pan while multiple views are open, all views zoom and pan simultaneously.

- 5 Click Export when you have finished changing settings.
- 6 In the Export dialog box, type a name for the file, choose a destination, set any other options if desired, and click Save.

For more information about the options in the Export dialog box, see [“Exporting from Fireworks” on page 247](#).

To set optimization settings using Export Preview:

- 1 Click the Options tab. Most of the options available here are similar to those in the Optimize panel. For more about these options, see [“Using optimization settings” on page 231](#).



- 2 Click the Optimize to Size Wizard button to optimize a graphic based on a target file size.

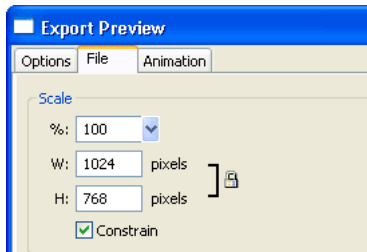
Enter a file size in kilobytes and click OK.

The Optimize to Size Wizard attempts to match the requested file size using these methods:

- Adjusting JPEG quality
- Modifying JPEG smoothing
- Altering the number of colors in 8-bit images
- Changing dither settings in 8-bit images
- Enabling or disabling optimization settings

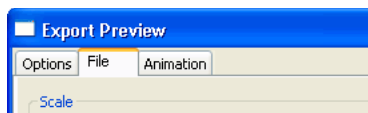
To set exported image dimensions using Export Preview:

- 1 Click the File tab.
- 2 Specify a scale percentage or enter the desired width and height in pixels. Select Constrain to scale the width and height proportionally.



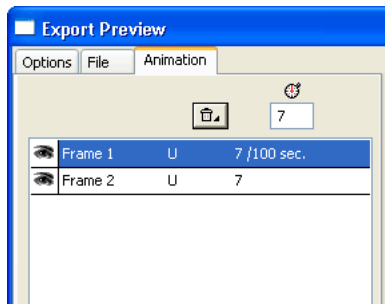
To define only a portion of an image for export using Export Preview:

- 1 Click the File tab.
- 2 Select the Export Area option and do one of the following to specify the export area:
 - Drag the dotted border that appears around the preview until it encloses the desired export area. (Drag inside the preview to move hidden areas into view.)
 - Enter pixel coordinates for the boundaries of the export area.



To set animation settings using Export Preview:

- 1 Click the Animation tab.
- 2 Use the following techniques to preview animation frames:
 - To display a single frame, select the desired frame in the list on the left side of the dialog box, or use the frame controls in the lower right area of the dialog box.
 - To play the animation, click the Play/Stop control in the lower right area of the dialog box.
- 3 Make edits to the animation:
 - To specify the frame disposal method, select the desired frame in the list and choose an option from the pop-up menu (indicated by the trash can icon).
 - To set the frame delay, select the desired frame in the list and enter the delay time in hundredths of a second in the Frame Delay field.



- To set the animation to play repeatedly, click the Looping button and choose the desired number of repetitions from the pop-up menu.
- Choose the Auto-Crop option to crop each frame as a rectangular area, so that only the image area that differs between frames is output. Selecting this option reduces file size.
- Choose the Auto-Difference option to output only pixels that change between frames. Selecting this option reduces file size.

Optimizing in the workspace

Exporting graphics for use on the web is a two-step process: optimizing, then exporting (or in some cases, simply saving). Optimizing graphics ensures they possess the right mix of color, compression, and quality. After you finalize a graphic's optimization settings, the graphic is ready for export.

You don't have to use the Export Wizard and Export Preview in Fireworks if you're comfortable optimizing and exporting graphics. Fireworks has optimization and export features in the workspace that give you greater control over how files are exported:

- The Optimize panel contains the key controls for optimizing. For 8-bit file formats, it also contains a color table that displays the colors in the current export color palette.

Note: When a slice is selected, the Optimize panel displays optimize settings for the selected slice. Likewise, when the whole document is selected, the Optimize panel displays optimize settings for the whole document. In other words, the active selection determines what is displayed in the Optimize panel.

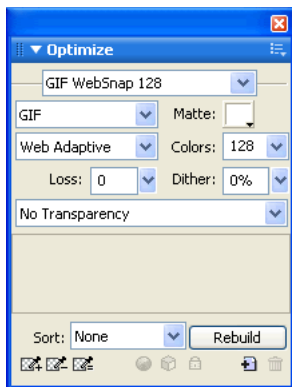
- When a slice is selected, the Property inspector has a Slice Export Settings pop-up menu from which you can choose preset or saved optimization settings.
- The preview buttons in the Document window show how the exported graphic would appear with the current optimization settings.

You can optimize the whole document the same way, or select individual slices or selected areas of a JPEG and assign different optimization settings for each.

Using optimization settings

You can choose from common optimization settings in the Property inspector or the Optimize panel to quickly set a file format and apply several format-specific settings. When you choose an option from the Default export options pop-up menu in the Property inspector, the rest of the options in the Optimize panel are automatically set for you. You can further adjust each option individually if desired.

If you need more custom optimization control than the preset options offer, you can create custom optimization settings in the Optimize panel. You can also modify a graphic's color palette using the color table in the Optimize panel.



To choose a preset optimization:

- Choose a preset from the Settings pop-up menu in the Property inspector or the Optimize panel:
 - GIF Web 216** forces all colors to websafe colors. The color palette contains up to 216 colors (see [“Optimizing GIF, PNG, TIFF, BMP, and PICT files” on page 235](#)).
 - GIF WebSnap 256** converts non-websafe colors to their closest websafe color. The color palette contains up to a maximum of 256 colors.
 - GIF WebSnap 128** converts non-websafe colors to their closest websafe color. The color palette contains up to 128 colors.
 - GIF Adaptive 256** is a color palette that contains only the actual colors used in the graphic. The color palette contains up to a maximum of 256 colors.
 - JPEG - Better Quality** sets quality to 80 and smoothing to 0, resulting in a high-quality but larger graphic.
 - JPEG - Smaller File** sets quality to 60 and smoothing to 2, resulting in a graphic less than half the size of a Better Quality JPEG but with reduced quality.
 - Animated GIF Websnap 128** sets the file format to Animated GIF and converts non-websafe colors to their closest websafe color. The color palette contains up to 128 colors.
- For more information about file types, see [“Choosing a file type” on page 234](#).

To specify custom optimization settings:

- 1 In the Optimize panel, choose an option from the Export File Format pop-up menu.
- 2 Set format-specific options, such as color depth, dither, and quality.
- 3 Choose other optimization settings from the Optimize panel Options menu, as necessary.
For more information about specific optimization controls, see the appropriate sections in [“Optimizing in the workspace” on page 231](#).
- 4 You can name and save custom optimization settings. Names of saved settings are displayed in the preset optimization settings in the Settings pop-up menu in the Optimize panel and the Property inspector when slices, buttons, or the canvas are selected. For more information, see [“Saving and reusing optimization settings” on page 246](#).

To modify the color palette:

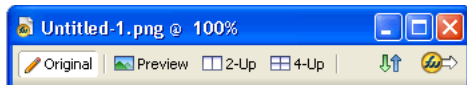
- If the Optimize panel isn't already open, choose Window > Optimize to view and edit a document's color palette.
For more information, see [“Optimizing GIF, PNG, TIFF, BMP, and PICT files” on page 235](#).

To optimize individual slices:

- 1 Click a slice to select it. Shift-click to select more than one slice.
- 2 Optimize the selected slices using the Optimize panel.

Previewing and comparing optimization settings

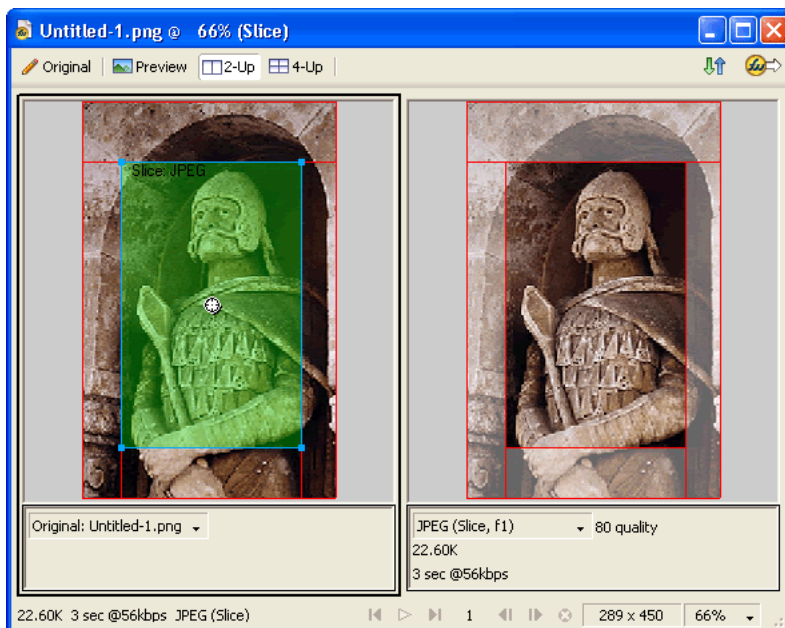
The document preview buttons display the graphic as it would appear in a web browser, based on optimization settings. You can preview rollover and navigation behaviors, as well as animation.



The Original button and the document preview buttons

The document preview buttons display a document's total size, estimated download time, and file format. The estimated download time is the average amount of time it would take to download all the document's slices and frames on a 56K modem. The 2-Up and 4-Up views display additional information that varies depending on the file type selected.

You can use the Optimize panel to optimize a document while viewing a preview as if you were in Original view. You can optimize the entire document at once or only selected slices. The slice overlay helps you differentiate the slices currently being optimized from the rest of the document. The slice overlay displays areas not currently being optimized with a dimmed, transparent white tint. You can turn the slice overlay on or off.



When you optimize a selected slice, the slices not being optimized are dimmed.

To preview a graphic based on the current optimization settings:

- Click the Preview button in the upper left of the Document window.



Note: Click Hide Slices in the Tools panel to hide slices and slice guides while previewing.

To compare views with different optimization settings:

- 1 Click the 2-Up or 4-Up button in the upper left of the Document window.
- 2 Click one of the split-view previews to select it.
- 3 Enter settings in the Optimize panel.
- 4 Select the other previews and specify different optimization settings for each preview to compare them.

When you choose 2-Up or 4-Up view, the first split-view displays the original Fireworks PNG document so that you can compare it with optimized versions. You can switch this view with another optimized version.

To switch any optimized view to the Original view from 2-Up or 4-Up view:

- 1 Select an optimized view.
- 2 Choose Original (No Preview) from the Preview pop-up menu at the bottom of the preview window.

To switch the Original view to an optimized view from 2-Up or 4-Up view:

- 1 Select the view containing the original.
- 2 Choose Export Preview from the Preview pop-up menu.

To hide or show the slice overlay:

- Choose View > Slice Overlay.

Note: This command is useful when you are in either the Preview, 2-Up preview, or 4-Up preview.

Choosing a file type

You should base your choice of file format upon the design and use of your graphic. A graphic's appearance can vary from one format to another, especially when different types of compression are used. In addition, only certain graphic file types are accepted by most web browsers. Still other file types are ideal for print publishing or use in multimedia applications.

The following file types are available:

GIF, or Graphics Interchange Format, is a popular web graphic format. GIFs contain a maximum of 256 colors. GIFs can also contain a transparent area and multiple frames for animation. Images with areas of solid color compress best when exported as GIFs. A GIF is usually ideal for cartoons, logos, graphics with transparent areas, and animations.

JPEG was developed by the Joint Photographic Experts Group specifically for photographic or high-color images. JPEG supports millions of colors (24-bit). The JPEG format is best for scanned photographs, images using textures, images with gradient color transitions, and any images that require more than 256 colors.

PNG, or Portable Network Graphic, is a versatile web graphic format. However, not all web browsers can view PNG graphics. A PNG can support up to 32-bit color, can contain transparency or an alpha channel, and can be progressive. PNG is the native file format for Fireworks. However, Fireworks PNG files contain additional application-specific information that is not stored in an exported PNG file or in files created in other applications.

WBMP, or Wireless Bitmap, is a graphic format created for mobile computing devices such as cell phones and PDAs. This format is used on Wireless Application Protocol (WAP) pages. WBMP is a 1-bit format, so only two colors are visible: black and white.

TIFF, or Tagged Image File Format, is a graphic format used for storing bitmap images. TIFFs are most commonly used in print publishing. Many multimedia applications also accept imported TIFF graphics.

BMP, the Microsoft Windows graphic file format, is a common file format used to display bitmap images. BMPs are used primarily on the Windows operating system. Many applications can import BMP images.

PICT, developed by Apple Computer, is a graphic file format commonly used on Macintosh operating systems. Most Mac applications are capable of importing PICT images.

Optimizing GIF, PNG, TIFF, BMP, and PICT files

Each graphic file format in Fireworks has a set of optimization options. For the most part, only the 8-bit file types such as GIF, PNG 8, TIFF 8, BMP 8, and PICT 8 offer a significant amount of optimization control.

Note: JPEG files are an exception. For more on JPEG optimization controls, see [“Optimizing JPEGs” on page 243](#).

Fireworks optimization settings are similar for all 8-bit graphic file formats. For web file formats such as GIF and PNG, you can also specify the amount of compression you want on the graphic.

You can optimize 8-bit file types by adjusting their color palettes. Fewer colors in the palette means fewer colors in the image, resulting in a smaller file size. The drawback to reducing colors is that it can also diminish image quality.

As you experiment with different optimization settings, you can use the 2-Up and 4-Up buttons to test and compare a graphic’s appearance and estimated file size. For more information on using the document preview buttons, see [“Previewing and comparing optimization settings” on page 233](#).

Note: All file types mentioned above (except PICT) can be opened and saved in Fireworks MX 2004 using their original filename extensions and optimization settings. This behavior differs from that in previous versions of Fireworks. For more information, see Fireworks Help.

Choosing a color palette

GIFs and other 8-bit image formats contain a color palette. A color palette is a list of up to 256 colors available to the file. Only colors defined in the color palette appear in the graphic; however, some color palettes contain colors that are not in the graphic.

The following palettes are available in Fireworks:

Adaptive is a custom palette derived from the actual colors in the document. Adaptive palettes most often produce the highest quality image.

Web Adaptive is an adaptive palette in which colors that are close to websafe colors are converted to the closest websafe color. Websafe colors are those that come from the Web 216 palette.

Web 216 is a palette of the 216 colors common to both Windows and Macintosh computers. This palette is often called a websafe or browser-safe palette because it produces fairly consistent results in various web browsers on either platform when viewed on 8-bit monitors.

Exact contains the exact colors used in the image. Only images containing 256 or fewer colors may use the Exact palette. If the image contains more than 256 colors, the palette switches to Adaptive.

Windows and Macintosh each contain the 256 colors defined by the Windows or Macintosh platform standards, respectively.

Grayscale is a palette of 256 or fewer shades of gray. Choosing this palette converts the image to grayscale.

Black and White is a two-color palette consisting only of black and white.

Uniform is a mathematical palette based on RGB pixel values.

Custom is a palette that has been modified or loaded from an external palette (ACT file) or a GIF file.

Adjusting the color palette during optimization affects the colors in the image. You can optimize and customize color palettes using the color table in the Optimize panel.

To choose a color palette:

- Choose an option from the Indexed Palette pop-up menu in the Optimize panel.

To import a custom palette:

- 1 Do one of the following:
 - Choose Load Palette from the Optimize panel Options menu.
 - Choose Custom from the Optimize panel Indexed Palette pop-up menu.
- 2 Navigate to an ACT or GIF palette file and click Open.

The colors from the ACT or GIF file are added to the color table in the Optimize panel.

Note: Windows users must choose GIF Files from the Files of Type pop-up menu to see files with a .gif extension in the Open dialog box.

Setting the color depth

Color depth is the number of colors in the graphic. You can make your files smaller by reducing the number of colors they use. Reducing color depth discards some colors in the image, beginning with those used least. Pixels containing discarded colors convert to the closest color remaining in the palette. This can reduce the quality of the image.

Note: The color depth option is available only for GIFs and other 8-bit graphic file formats.

To choose a color depth:

- Choose an option from the Colors pop-up menu in the Optimize panel or type a value in the text box. You can choose from 2 to 256 colors.

Note: The actual colors in the image could be lower than the maximum number of colors you choose. The number at the bottom of the color table indicates the actual number of colors visible in the image. If no number is visible, you'll see a Rebuild button, which indicates you should rebuild the color palette. For more information, see [“Viewing colors in a palette” on page 237](#).

To choose a color depth beyond 256 colors:

- Choose a 24- or 32-bit file format from the Export File Format pop-up menu in the Optimize panel.

Note: Higher color depths create larger files and are typically not ideal for web graphics. Use only 24- or 32-bit color depths when exporting or saving photographic images with continuous tones or complex gradient blends of colors. For high-color-depth graphics on the web, use JPEG files. For more information, see [“Optimizing JPEGs” on page 243](#).

Removing unused colors

Removing unused colors from an image before exporting or saving makes its file size smaller.

Note: This option is available only for GIFs and other 8-bit graphic file formats.

To remove unused colors:

- Choose Remove Unused Colors from the Optimize panel Options menu.

To include all colors in the palette, including colors that are not present in the exported or saved image:

- Deselect Remove Unused Colors.

Dithering to approximate lost colors

Dithering approximates colors not in the current palette by alternating similarly colored pixels. From a distance, the colors blend to create the appearance of the missing color. Dithering is especially helpful when exporting images with complex blends or gradients or when exporting photographic images to an 8-bit graphic file format such as GIF.

Dithering can greatly increase file size.

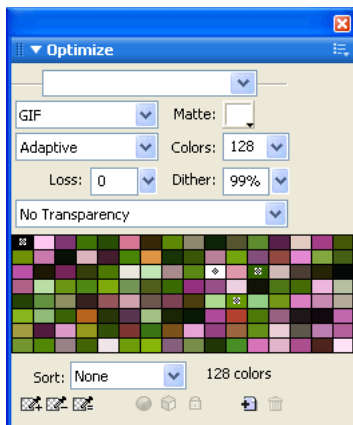
Note: The dithering option is available only for GIFs, other 8-bit graphic file formats, and WBMPs.

To dither a graphic:






- Enter a percentage value in the Dither text box of the Optimize panel.

Viewing colors in a palette

The color table in the Optimize panel displays colors in the current preview when you are working in 8-bit color or less and lets you modify an image's palette. The color table updates automatically when you are in Preview mode. It appears empty if you are optimizing more than one slice at a time or if you are not optimizing in an 8-bit format such as GIF.



Various small symbols appear on some color swatches, indicating certain characteristics of individual colors, as follows:

Symbol	Meaning
	The color has been edited, affecting only the exported document. This does not change the color in the source document.
	The color is locked.
	The color is transparent.
	The color is websafe.
	The color has multiple attributes. In this case, the color is websafe, is locked, and has been edited.

If you edit the document, the color table may no longer show all the colors in the document. When this occurs, you should rebuild the color table. A Rebuild button appears at the bottom of the Optimize panel when you need to rebuild the color table.

To rebuild the color table to reflect edits in the document:

- Click Rebuild at the bottom of the Optimize panel.
When the table is rebuilt, the Rebuild button disappears, and the actual number of colors used in the image is displayed in its place.

To select a color:

- Click the color in the Optimize panel color table.

To select multiple colors:

- Control-click (Windows) or Command-click (Macintosh) the colors.

To select a range of colors:

- 1 Click a color.
- 2 Hold Shift and click the last color in the range you want to select.

To preview all the pixels in the document that contain a specific color:

- 1 Click the Preview button at the upper left of the Document window.
- 2 Click and hold on a swatch in the Optimize panel color table.

The pixels that contain the selected swatch temporarily change to another highlight color until you release the mouse button.

Note: When previewing pixels in the document using the 2-Up or 4-Up view, select a view other than the Original view.

Locking colors in a palette

You can lock individual colors so that you cannot remove or change them when changing palettes or when reducing the number of colors in a palette. If you switch to another palette after colors have been locked, locked colors are added to the new palette.

To lock a selected color, do one of the following:



- Click the Lock button at the bottom of the Optimize panel.
- Right-click (Windows) or Control-click (Macintosh) the color swatch, and choose Lock Color from the context menu.

To unlock a color:

- 1 Select a locked color in the Optimize panel color table.
- 2 Click the Lock button in the Optimize panel, or right-click (Windows) or Control-click (Macintosh) the color swatch and choose Lock Color.

To unlock all colors:

- Choose Unlock All Colors from the Optimize panel Options menu.

Editing colors in a palette

You can change a color in the current palette by editing it in the Optimize panel color table. Editing a color replaces all instances of that color in the image to be exported or to be saved as a bitmap. Editing does not replace the color in the original image, unless you are working with a bitmap and save the image as such; in this case, you should also save the image as a PNG file to retain an editable version of the original image.

To edit a color:



- 1 Do one of the following to open the system color picker:
 - Select a color and click the Edit Color button at the bottom of the Optimize panel.
 - Double-click a color in the color table.
- 2 Change the color using the system color picker.

The new color replaces every instance of the replaced color in the preview area.

Note: Right-click (Windows) or Control-click (Macintosh) a color in the palette to display a shortcut menu of edit options for the color.

Using websafe colors

Websafe colors are colors that are common to both Macintosh and Windows platforms. These colors are not dithered when viewed in a web browser on a computer display set to 256 colors.

Fireworks has several methods of applying and using websafe colors.

To force all colors to be websafe colors:

- Choose Web 216 from the Indexed Palette pop-up menu in the Optimize panel.

To create an adaptive palette that favors websafe colors:

- Choose Web Adaptive from the Indexed Palette pop-up menu in the Optimize panel.
Non-websafe colors that are close to websafe colors are converted to the closest websafe color.

To force a color to its closest websafe equivalent:

- 1 Select a color in the Optimize panel color table.
- 2 Click the Snap to Web Safe button.



If you save a Fireworks PNG, changing colors to websafe in the Optimize panel affects only the exported version of the image, not the actual image.

Saving palettes

You can save custom palettes as external palette files. You can use saved palettes with other Fireworks documents or in other applications that support external palette files, such as Macromedia FreeHand, Macromedia Flash, and Adobe Photoshop. Saved palette files have the .act extension.

To save a custom color palette:

- 1 Choose Save Palette from the Optimize panel Options menu.
- 2 Type a name for the palette and choose a destination folder.
- 3 Click Save.

You can load the saved palette file into the Swatches panel or Optimize panel for use when exporting other documents.

Adjusting compression

You can compress GIF files to make them even smaller than usual by changing their loss setting. Higher loss settings can yield smaller files but lower image quality. A loss setting between 5 and 15 typically yields the best results.



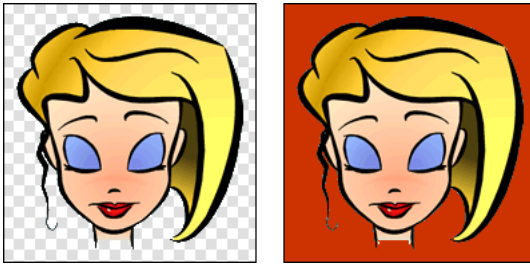
Original GIF; loss value of 30; loss value of 100

To change a GIF's compression:

- Enter a Loss setting in the Optimize panel.

Making areas transparent

You can set transparent areas for GIFs and 8-bit PNGs so that in a web browser the background of the web page is visible through those areas. In Fireworks, a gray-and-white checkerboard on document previews denotes transparent areas.



Optimized image preview in Fireworks; image exported with transparency and placed on a web page with a colored background

Note: 32-bit PNGs automatically contain transparency, though you won't see a transparency option for 32-bit PNGs in the Optimize panel.

You should use index transparency when exporting GIF images that contain transparent areas. With index transparency, you set specific colors to be transparent upon export. Index transparency turns on or turns off pixels with specific color values. Because GIFs support index transparency, it is the most common form of transparency used on the web.

Note: GIF images are exported without transparency by default in Fireworks. Even if the canvas behind an image or object appears transparent in Original view in Fireworks, this does not mean that the background for that image will be transparent when you export it as a GIF for use on the web. You must choose Index Transparency before export.

You can also use alpha transparency, although it is not often used with web graphics because only PNGs support it and most web browsers do not support PNG format. Alpha transparency is often used in exported graphics that contain gradient transparency and semi-opaque pixels. Alpha transparency is also useful for exporting files to Macromedia Flash or Director, because both applications support this type of transparency.

Note: Setting colors to transparent affects only the exported version of the image, not the actual image. You can see what the exported image will look like in a preview. For information about the document preview buttons, see [“Previewing and comparing optimization settings” on page 233](#).

To select a color for transparency:

- 1 Click the Preview, 2-Up, or 4-Up button at the upper left of the Document window. In 2-Up or 4-Up view, click a view other than the original.
- 2 In the Optimize panel, choose Index Transparency from the Transparency pop-up menu at the bottom of the panel.

The canvas color is made transparent in the preview.



- 3 To choose a different color, click the Select Transparency Color button.

The pointer changes to an eyedropper.

- 4 Do one of the following to choose the color to make transparent:
 - Click a color swatch in the Optimize panel color table.
 - Click a color in the document.

To add or remove transparent colors:

- 1 Click the Preview, 2-Up, or 4-Up button at the upper left of the Document window. In 2-Up or 4-Up view, click a view other than the original.

Note: You can add or remove transparent colors in Original view but won't be able to see your results until you display a preview.

- 2 In the Optimize panel, click the Add Color to Transparency or Remove Color from Transparency button.



- 3 Do one of the following to choose a color to add or remove from transparency:
 - Click a color swatch in the Optimize panel color table.
 - Click a color in the preview.

To make an image background transparent:

- 1 Click the Preview, 2-Up, or 4-Up button at the upper left of the Document window. In 2-Up or 4-Up view, click a view other than the original.
- 2 Choose GIF as the file format in the Optimize panel, and choose Index Transparency from the Transparency pop-up menu.

The canvas color is made transparent in the preview, and the graphic is ready for export.

Interlacing: Downloading gradually

When viewed in a web browser, interlaced images appear gradually while they are downloading. They display at a low resolution first and then transition to full resolution by the time the download is complete.

Note: This option is available only for GIF and PNG file formats. You can get similar results with a JPEG by making it progressive. For more information, see [“Optimizing JPEGs” on page 243](#).

To make a GIF or non-Fireworks PNG interlaced:

- Choose Interlaced from the Optimize panel Options menu.

Optimizing JPEGs

Using the Optimize panel, you can optimize JPEGs by setting compression and smoothing options.

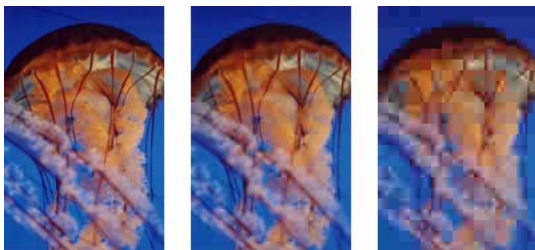
JPEGs are always saved and exported in 24-bit color, so you can't optimize a JPEG by editing its color palette. The color table is empty when a JPEG image is selected.

As you experiment with different optimization settings, you can use the 2-Up and 4-Up buttons to test and compare a JPEG's appearance and estimated file size. For more information on using the document preview buttons, see [“Previewing and comparing optimization settings” on page 233](#).

Note: JPEGs can be opened and saved in Fireworks MX 2004 using their original filename extension and optimization settings. This behavior differs from that in previous versions of Fireworks. For more information, see Fireworks Help.

Adjusting JPEG Quality

JPEG is a lossy format, which means that some image data is discarded when it is compressed, reducing the quality of the final file. However, image data can sometimes be discarded with little or no noticeable difference in quality.



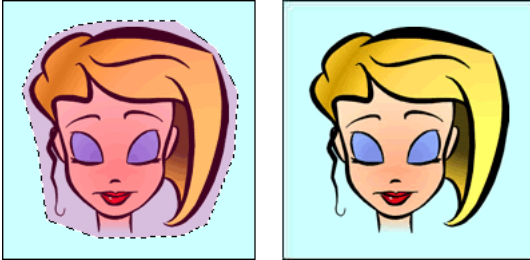
Original image; quality setting of 50; quality setting of 20

To control how much quality is lost when compressing a JPEG file:

- Adjust the quality with the Quality slider pop-up menu in the Optimize panel.
A high percentage setting maintains image quality but compresses less, producing larger files.
A low percentage setting yields a small file but produces a lower-quality image.

Selectively compressing areas of a JPEG

Selective JPEG compression lets you compress different areas of a JPEG at different levels. Areas of particular interest in an image can be compressed at a higher quality level. Areas of lesser significance, such as backgrounds, can be compressed at a lower quality level, reducing the overall size of the image while retaining the quality of the more important areas.



The selected area in this image is being compressed at a quality level of 90, while the unselected area is being compressed at a quality level of 50.

To compress selected areas of a JPEG:

- 1 In Original view, select an area of the graphic for compression using one of the Marquee tools.
- 2 Choose Modify > Selective JPEG > Save Selection as JPEG Mask.
- 3 Choose JPEG from the Export File Format pop-up menu in the Optimize panel, if it's not already selected.
- 4 Click the Edit Selective Quality Options button in the Optimize panel.
The Selective JPEG Settings dialog box opens.
- 5 Choose Enable Selective Quality and enter a value in the text box.
Entering a low value compresses the Selective JPEG area more than the rest of the image.
Entering a high value compresses the Selective JPEG area less than the rest of the image.
- 6 Change the Overlay Color for the Selective JPEG area if desired. This does not affect the output.
- 7 Select Preserve Text Quality. All text items will automatically be exported at a higher level, regardless of the Selective Quality value.
- 8 Select Preserve Button Quality. All button symbols will automatically be exported at a higher level.
- 9 Click OK.

To modify the selective JPEG compression area:

- 1 Choose Modify > Selective JPEG > Restore JPEG Mask as Selection.
The selection is highlighted.
- 2 Use the Marquee tool or another selection tool to make changes to the size of the area.
- 3 Choose Modify > Selective JPEG > Save Selection as JPEG Mask.
- 4 Change selective quality settings in the Optimize panel if desired.

Note: To undo a selection, choose Modify > Selective JPEG > Remove JPEG Mask.

Blurring or sharpening detail

You can set Smoothing in the Optimize panel to help decrease the file size of JPEGs. Smoothing blurs hard edges, which do not compress well in JPEGs. Higher numbers produce more blurring in the exported or saved JPEG, typically creating smaller files. A smoothing setting of about 3 reduces the size of the image while still maintaining reasonable quality.

To help preserve fine edges between two colors:

- Choose Sharpen JPEG Edges from the Optimize panel Options menu.
Use Sharpen JPEG Edges when exporting or saving JPEGs with text or fine detail to preserve the sharpness of these areas. Choosing Sharpen JPEG Edges increases file size.

Using progressive JPEGs

Progressive JPEGs, such as interlaced GIFs and PNGs, are displayed at a low resolution initially and then increase in quality as they download.

To export or save a progressive JPEG:

- Choose Progressive JPEG from the Optimize panel Options menu.
Note: Some older bitmap-editing applications cannot open progressive JPEGs.

Matching a target background color

Anti-aliasing makes an object appear smoother by blending the color of an object into the background on which it is placed. For example, if the object is black and the page on which it rests is white, anti-aliasing adds several shades of gray to the pixels surrounding the object's border to make a smoother transition between the black and white.



By setting the Matte option in the Optimize panel, you can anti-alias objects that lie directly above the canvas to the Matte color. This is useful when exporting or saving graphics for placement on web pages with colored backgrounds.

To match a target background color:

- In the Optimize panel, select a color from the Matte pop-up menu. Match it as closely as possible to the target background color on which the graphic will be placed.

Note: Anti-aliasing is applied only to soft-edged objects that lie directly on top of the canvas.

Removing halos

When you make the canvas color transparent on an image that was previously anti-aliased, the pixels from the anti-aliasing remain. Then when you export (or in some cases, save) the graphic and place it on a web page with a different background color, the perimeter pixels of the anti-aliased object may be apparent on the web page's background. These form a halo, which is especially noticeable on a dark background.



You can easily prevent halos in native Fireworks PNG files and in imported Photoshop files. For other file types such as GIF, however, you must remove the halo manually.

To prevent halos in native Fireworks PNG files and imported Photoshop files, do one of the following:

- Set the Canvas Color in the Property inspector or the Matte Color in the Optimize panel to the color of the target web page background.
- With the object you want to export selected, choose Hard from the Edge pop-up menu in the Property inspector.

To remove a halo manually from a GIF or other graphic file:

- 1 With the file open in Fireworks, click the Preview, 2-Up, or 4-Up button at the upper left of the Document window. In 2-Up or 4-Up view, click a view other than the original.
- 2 In the Optimize panel, choose Index Transparency from the Transparency pop-up menu.
- 3 Click the Add Color to Transparency button and click a pixel in the halo.
All pixels of the same color are removed in the preview.
- 4 If the halo is still there, repeat step 3 until the halo is gone.



Saving and reusing optimization settings

You can save custom optimization settings for future use in optimization or batch processing. The following information is saved in custom preset optimizations:

- Settings and color table in the Optimize panel
- Frame delay settings chosen in the Frames panel (for animations only)

To save optimization settings as a preset:

- 1 Select Save Settings from the Optimize panel Options menu.
- 2 Type a name for the optimization preset and click OK.

Saved optimization settings appear at the bottom of the Settings pop-up menu in the Optimize panel and in the Property inspector. They are available in all subsequent documents. The preset file is saved in the Export Settings folder in your user-specific Fireworks configuration folder. For information on the location of this folder, see [“About user configuration files” on page 286](#).

To share saved optimization settings with another Fireworks user:

- Copy the saved optimization preset file from the Export Settings folder to the same folder on another computer.

Note: The location of the Export Settings folder varies depending on your operating system. For more information, see the previous procedure.

To delete a custom preset optimization:

- 1 In the Optimize panel Saved Settings pop-up menu, choose the optimization setting you want to delete.
 - 2 Select Delete Settings from the Optimize panel Options menu.
- You cannot delete a Fireworks preset optimization setting.

Exporting from Fireworks

Exporting from Fireworks is a two-step process. First you must prepare your graphic or document for export by optimizing it. After your graphic or document has been optimized, you can export it (or save it, depending on its originating file type). For more information on optimizing, see [“About optimizing” on page 226](#). For more information on saving, see Fireworks Help.

You can export Fireworks graphics in a number of ways. You can export (or in some cases, save) a document as a single image in GIF, JPEG, or another graphic file format. Or you can export the entire document as an HTML file and associated image files. Or you can choose to export selected slices only. You can also export only a specified area of your document. In addition, you can export Fireworks frames and layers as separate image files.

The default location to which Fireworks exports files is determined by the following, in this order:

- 1 The document’s current export preference, which is defined if you’ve ever exported the document and then saved the PNG
- 2 The current export/save location, which is defined anytime you browse away from the default location presented in a Save, Save As, Save a Copy, or Export dialog box
- 3 The current file’s location
- 4 The default location where new documents or images are saved on your operating system

In contrast, the default location where Fireworks saves a document is determined by a different set of criteria. For more information, see Fireworks Help.

Exporting a single image

You use the File > Export command to export a graphic after you have finished optimizing it in the workspace.

If you are working with an existing image that you opened in Fireworks, you may be able to save it rather than export it, depending on the image's original file type. For more information, see [Fireworks Help](#).

Note: To export only certain images in a document, you must first slice your document and then export only the desired slices. For more information, see [“Exporting selected slices” on page 249](#).

To export a Fireworks document as a single image:

- 1 Choose the file format you would like to use for exporting in the Optimize panel and set format-specific options.
- 2 Choose File > Export.
- 3 Choose a location to export the image file to.
For web graphics, the best location is typically a folder within your local website.
- 4 Enter a filename. You do not need to enter a file extension; Fireworks does that for you upon export using the file type you specified in your optimization settings. For more information on optimizing, see [“About optimizing” on page 226](#).
- 5 Choose Images Only from the Save As Type pop-up menu.
- 6 Click Save.

Exporting a sliced document

By default, when you export a sliced Fireworks document, an HTML file and associated images are exported. The exported HTML file can be viewed in a web browser or imported into other applications for further editing.

Note: You can get Fireworks HTML into other applications using any of several techniques. For more about HTML and the other ways to export Fireworks HTML, see [“Exporting HTML” on page 252](#).

Before export, be sure you have the appropriate HTML style selected in the HTML Setup dialog box. For more information, see [“Setting HTML export options” on page 259](#).

To export a sliced Fireworks document:

- 1 Choose File > Export.
- 2 Navigate to the desired folder on your hard drive.
- 3 Choose HTML and Images from the Save as Type pop-up menu.
- 4 Type a filename in the File Name (Windows) or Save As (Macintosh) box.
- 5 Choose Export HTML File from the HTML pop-up menu.
- 6 Choose Export Slices from the Slices pop-up menu.
- 7 (Optional) Choose Put Images in Subfolder.
- 8 Click Save.

The files Fireworks exported appear on your hard disk. Images and an HTML file are generated in the location you specified in the Export dialog box. For more information about the options available in the Export dialog box when HTML and Images is selected as the file type, see [“Exporting Fireworks HTML” on page 253](#).

Exporting selected slices

You can export selected slices in a Fireworks document. Shift-click to select multiple slices.

Note: For more information on slicing, see [“Creating and editing slices” on page 167](#).

To export selected slices:

- 1 Do one of the following:
 - Choose File > Export.
 - To export an individual slice, right-click (Windows) or Control-click (Macintosh) the slice and choose Export Selected Slice.
- 2 Choose a location in which to store the exported files.
Typically, the best location is a folder within your local website.
- 3 Enter a filename. You do not need to enter an extension; Fireworks does that for you.
If you are exporting multiple slices, Fireworks uses the name you enter as the root name for all exported graphics, excluding those you have custom-named using the Layers panel or the Property inspector.
- 4 Choose Export Slices from the Slices pop-up menu.
- 5 To export only the slices you selected before export, choose Selected Slices Only, and ensure that the Include Areas Without Slices option is **not** selected.
- 6 Click Save.

Each slice is exported using its optimization settings as defined in the Optimize panel. For more information about optimizing, see [“About optimizing” on page 226](#).

Updating a slice

If you’ve already exported a sliced document, and you’ve made changes to the original document in Fireworks since you exported it, you can update just the image or slice that changed without having to export and upload the entire sliced image. It is recommended that you custom-name slices so that you can easily locate the replacement slice. For more information, see [“Naming slices” on page 181](#).

To update a single slice:

- 1 Hide the slice and edit the area underneath.
- 2 Show the slice again.
- 3 Right-click (Windows) or Control-click (Macintosh) the slice and choose Export Selected Slice from the context menu.
- 4 Click Save to export the slice into the same folder as the original slice using the same base name.
- 5 Click OK when asked to replace the existing file.

If you retain the original filename for the updated slice and upload the slice to the same place on your website where the original came from, the new slice replaces the original slice in the HTML document.

Note: Avoid resizing the slice beyond its original export size in Fireworks, or you could create unexpected results in the HTML document after the slice is updated.

Exporting an animation

After you create and optimize an animation, it is ready to export. You can export an animation as an Animated GIF, as a Flash SWF file, or as multiple files.

If your document contains more than one animation, you can insert slices on top of each animation to export each using different animation settings, such as looping and frame delay.

For information about exporting to multiple files, see [“Exporting frames or layers” on page 251](#). For information about exporting animations as Flash SWF files, see [“Working with Macromedia Flash MX 2004” in Working with Other Applications on the Fireworks Support Center at \[www.macromedia.com/support/fireworks/\]\(http://www.macromedia.com/support/fireworks/\)](#).

To export an animation as an animated GIF:

- 1 Choose Edit > Deselect to deselect all slices and objects, and choose Animated GIF as the file format in the Optimize panel.
For more information on optimizing, see [“Optimizing GIF, PNG, TIFF, BMP, and PICT files” on page 235](#).
- 2 Choose File > Export.
- 3 In the Export dialog box, type a name for the file and choose the destination.
- 4 Click Save.

To export multiple animations with different animation settings as animated GIFs:

- 1 Shift-click the animations to select them all.
- 2 Choose Edit > Insert > Slice.
A message box appears, asking if you want to insert one slice or multiple slices.
- 3 Click Multiple.
- 4 Select each slice individually and use the Frames panel to set different animation settings for each. For more information about animation settings, see [Chapter 11, “Creating Animation,” on page 211](#).
- 5 Select all the slices you would like to animate, and choose Animated GIF as the file format in the Optimize panel.
For more information on optimizing, see [“Optimizing GIF, PNG, TIFF, BMP, and PICT files” on page 235](#).
- 6 Right-click (Windows) or Control-click (Macintosh) each slice and choose Export Selected Slice from the context menu to export each slice individually. In the Export dialog box, type a name for each file, choose the destination, and click Save.

Exporting frames or layers

Fireworks can export each layer or frame in a document as a separate image file, using the optimization settings specified in the Optimize panel. The name of the layer or frame determines the filename of each exported file. This export method is sometimes used to export animations.

To export frames or layers as multiple files:

- 1 Choose File > Export.
- 2 Type a filename and choose a destination folder.
- 3 In the Save As Type pop-up menu, choose one of the following:
 - Frames to Files** exports frames as multiple files.
 - Layers to Files** exports layers as multiple files.

Note: This exports all layers on the current frame.
- 4 Choose Trim Images to automatically crop the exported images to fit the objects on each frame. If you want to export frames or layers the same size as the document, deselect Trim Images.
- 5 Click Save.

Exporting an area



You can use the Export Area tool to export a portion of a Fireworks document.

To export a portion of a document:

- 1 Choose the Export Area tool from the Tools panel.
- 2 Drag a marquee defining the portion of the document to export.

Note: You can adjust the position of the marquee as you drag. While holding down the mouse button, press and hold down the Spacebar, then drag the marquee to another location on the canvas. Release the Spacebar to continue drawing the marquee.

When you release the mouse button, the export area remains selected.

- 3 Resize the export area if necessary:
 - Shift-drag a handle to resize the export area marquee proportionally.
 - Alt-drag (Windows) or Option-drag (Macintosh) a handle to resize the marquee from the center.
 - Alt-Shift-drag (Windows) or Option-Shift-drag (Macintosh) a handle to constrain the proportions and resize from the center.
- 4 Double-click inside the export area marquee to go to Export Preview.
- 5 Adjust settings in the Export Preview, and click Export.
- 6 In the Export dialog box, type a filename and choose a destination folder.
- 7 In the Save As pop-up menu, choose Images Only.
- 8 Click Save.

Note: To cancel without exporting, double-click outside the export area marquee, press Escape, or choose another tool.

Exporting HTML

Unless you specify otherwise, when you export a sliced Fireworks document, what you're actually exporting is an HTML file and its images.

Fireworks generates pure HTML that can be read by most web browsers and HTML editors. There are a variety of ways to export Fireworks HTML:

- Export an HTML file, which you can later open for editing in an HTML editor.
- Copy HTML code to the Clipboard in Fireworks, and then paste that code directly into an existing HTML document.
- Export an HTML file, open it in an HTML editor, manually copy sections of code from the file, and paste that code into another HTML document.
- Use the Update HTML command to make changes to an HTML file you've previously created.

Note: Macromedia Dreamweaver shares a tight integration with Fireworks. Fireworks handles the export of HTML to Dreamweaver differently than it handles export to other HTML editors. If you are exporting Fireworks HTML to Dreamweaver, see "Working with Macromedia Dreamweaver MX 2004" in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

You can also export HTML as Cascading Style Sheet (CSS) layers. Fireworks supports UTF-8 encoding and XHTML, so you can export documents using these standards as well.

To define how Fireworks exports HTML, you use the HTML Setup dialog box. These settings can be document-specific or used as your default settings for all HTML that Fireworks exports.

About HTML

HTML code is automatically generated by Fireworks when you export, copy, or update HTML. You do not need to understand it to use it. After it is generated there is no need to change it to make it work, as long as you do not rename or move files.

HTML, or Hypertext Markup Language, is currently the standard for displaying web pages on the Internet. An HTML file is a text file that contains these elements:

- Text that will appear on the web page
- HTML tags that define the formatting and structure of that text and of the entire document as well as links to images and other HTML documents (web pages)

HTML tags are enclosed in brackets and look something like this:

```
<TAG> affected text </TAG>
```

The opening tag tells a browser to format the text following in a certain way or to include a graphic. The closing tag (</TAG>), when there is one, indicates the end of that formatting.

Including comments in HTML

Fireworks HTML is well commented, telling you what the pieces of code relate to. Fireworks HTML comments begin with `<!--` and end with `-->`. Anything between these two markers is not interpreted as HTML or JavaScript code. If you want comments included in your HTML, you must tell Fireworks you want this option turned on.

To include comments in exported HTML:

- Before exporting, choose the Include HTML Comments option on the General tab of the HTML Setup dialog box.

Results of exporting

When you export or copy HTML from Fireworks, the following is generated so that your Fireworks image can be re-created on a web page:

- The HTML code necessary to reassemble sliced images and any JavaScript code if the document contains interactive elements. Fireworks HTML contains links to the exported images and sets the web page background color to the canvas color.
- One or more image files, depending on how many slices are in your document and how many states you include in buttons.
- A file called spacer.gif, if necessary. Spacer.gif is a transparent, 1-pixel-by-1-pixel GIF that Fireworks uses to fix spacing problems when sliced images are reassembled in an HTML table. You can choose whether Fireworks exports a spacer. For more information, see [“Setting HTML export options” on page 259](#).
- If your Fireworks document contains pop-up menus, a file called mm_menu.js. This file contains the code necessary for displaying pop-up menus. If your pop-up menus contain submenus, an arrows.gif file is also exported.
- If you export or copy HTML to Macromedia Dreamweaver, notes files that facilitate the integration between Fireworks and Dreamweaver. These files have an .mno extension.

Exporting Fireworks HTML

Fireworks lets you export HTML in Generic, Dreamweaver, FrontPage, and Adobe® GoLive® formats. Generic HTML works in most HTML editors. Exporting Fireworks HTML generates an HTML file and the associated image files in a location you specify.

Note: Fireworks also exports HTML when you export to CSS layers and to Macromedia Director. For more information about CSS layers, see [“Exporting CSS layers” on page 258](#). For more about Director, see “Working with Macromedia Director MX” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

The export method of getting Fireworks HTML into other applications is ideal if you are working in a team environment. Exporting an HTML file divides the workflow into segments so that one person can perform a task in one application, and another can take over at a later time using another application.

You can set up global HTML export preferences using the HTML Setup dialog box. For more information, see “[Setting HTML export options](#)” on page 259.

Note: Macromedia Dreamweaver shares a tight integration with Fireworks. Fireworks handles the export of HTML Dreamweaver differently than that of other HTML editors. If you are exporting Fireworks HTML to Dreamweaver, follow these instructions, but for additional application-specific notes, also see “Working with Macromedia Dreamweaver MX 2004” in *Working with Other Applications* on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

To export Fireworks HTML:

- 1 Do one of the following to open the Export dialog box:
 - Choose File > Export.
 - Click the Quick Export button at the upper right corner of the Document window, then choose an export option from the destination application’s pop-up menu. Fireworks automatically fills in the text boxes of the Export dialog box with the appropriate settings for the selected application.

Note: Non-Macromedia applications are found in the Quick Export > Other submenu.

- 2 Navigate to the desired site folder on your hard drive.
- 3 Choose HTML and Images from the Save as Type pop-up menu.
- 4 Click the Options button and choose your HTML editor from the HTML Style pop-up menu on the General tab of the HTML Setup dialog box. If your HTML editor is not listed, choose Generic.

Note: It’s important that you choose your HTML editor as the HTML style; if you do not, interactive elements such as buttons and rollovers may not function correctly when imported into your HTML editor.

- 5 Click OK to return to the Export dialog box.
- 6 Choose Export HTML file from the HTML pop-up menu.
Choosing Export HTML generates an HTML file and the associated image files in the location you specify.
- 7 Choose Export Slices from the Slices pop-up menu if your document contains slices.
- 8 Choose Put Images in Subfolder if you want images stored in a separate folder. You can choose a specific folder or use the Fireworks default, which is a folder named images.
- 9 Click Save.

After export, you’ll see the files Fireworks exported on your hard drive. Images and an HTML file are generated in the location you specified in the Export dialog box.

Copying HTML to the Clipboard

A fast way to export Fireworks-generated HTML is to copy it to the Clipboard.

You can copy HTML code in Fireworks in either of two ways. You can use the Copy HTML Code command, or you can choose Copy to Clipboard as an option in the Export dialog box. Doing so will copy the Fireworks HTML to the Clipboard and generate the associated image files in the location you specify. You'll later paste this HTML into a document in your preferred HTML editor.

Although copying to the Clipboard is a fast way to get Fireworks HTML into other applications, it is not ideal in every situation. Copying HTML to the Clipboard has the following disadvantages:

- You don't have the option to save images into a subfolder. They must reside in the same folder as the HTML file where you paste the copied HTML. An exception is HTML copied to Macromedia Dreamweaver.
- Any links or paths used in Fireworks pop-up menus will map to your hard drive. HTML copied to Dreamweaver is an exception.
- If you use an HTML editor other than Dreamweaver or Microsoft FrontPage, JavaScript code associated with buttons, behaviors, and rollover images is copied but may not function correctly.

If these issues pose a problem for you, use the Export HTML option instead of copying HTML to the Clipboard.

Note: Before you copy HTML code, be sure that you've selected the appropriate HTML style and chosen Include HTML Comments from the General tab of the HTML Setup dialog box. For more information, see ["Setting HTML export options" on page 259](#).

To copy Fireworks HTML using the Copy HTML Code option:

- 1 Do one of the following:
 - Choose Edit > Copy HTML Code.
 - Click the Quick Export button and choose Copy HTML Code from the pop-up menu.
- 2 Follow the wizard as it guides you through the settings for exporting your HTML and images. When prompted, specify a desired folder as the destination for the exported images. This must be the location where your HTML file will reside.

Note: If you plan to paste the HTML code into Macromedia Dreamweaver, it does not matter where you export the images, as long as they reside in the same Dreamweaver site as the HTML file into which you will paste your code.

The wizard exports the images to the specified destination and copies the HTML code to the Clipboard.

To copy Fireworks HTML using the Export dialog box:

- 1 Choose File > Export.

Note: Optionally, if you are exporting to Dreamweaver, click the Quick Export button and choose Copy HTML to Clipboard from the Dreamweaver submenu.

- 2 In the Export dialog box, specify a folder as the destination for the exported images. This must be the same location where your HTML file will reside.

Note: If you plan to paste the HTML code into Macromedia Dreamweaver, it does not matter where you export the images, as long as they reside in the same Dreamweaver site as the HTML file into which you will paste your code.

- 3 Choose HTML and Images from the Save as Type pop-up menu.
- 4 Choose Copy to Clipboard from the HTML pop-up menu.
- 5 If your document contains slices, choose Export Slices from the Slices pop-up menu.
- 6 Click the Options button, choose your HTML editor from the HTML Setup dialog box, and click OK.
- 7 Click Save in the Export dialog box.

To paste HTML copied from Fireworks into an HTML document:

- 1 In your HTML editor, open an existing HTML document or create a new one. Save the document to the same location in which you exported your images.

Note: Saving the HTML file to the same location as the exported images is not necessary if you use Macromedia Dreamweaver. As long as you export the images from Fireworks to a Dreamweaver site, and save the HTML file to a location somewhere within that site, Dreamweaver automatically resolves the paths to the associated images.

- 2 View the HTML code, and place the insertion point in the desired location between the <BODY> tags.

Note: HTML code copied from Fireworks does not include the opening or closing <HTML> and <BODY> tags.

- 3 Paste the HTML code. Refer to the help system within your specific HTML editor for instructions on pasting contents from the Clipboard.

When pasting code into HTML editors, it is important to keep images and HTML files in the correct location, or links could be broken. If possible when you copy to the Clipboard, make sure images are exported to the final location where they will reside on the website. Fireworks uses document-relative URLs, so if the HTML or images are moved, the URL links are broken.

Copying and pasting HTML from an exported Fireworks file

You can open exported Fireworks HTML in an HTML editor and copy and paste sections of code into another HTML file.

To copy code from an exported Fireworks file and paste it into another HTML document:

- 1 Open the Fireworks HTML file you exported in an HTML editor.
- 2 Highlight the necessary code and copy it to the Clipboard.
- 3 Open an existing HTML document or create a new one.
- 4 Paste the code from the Clipboard at the desired location in the new HTML file. You do not have to copy the `<HTML>` and `<BODY>` tags, because these should already be included in the destination HTML document.

If you chose Include HTML Comments in the HTML Setup dialog box in Fireworks, follow the instructions in the comments to copy and paste the code into the appropriate location.

- 5 If your Fireworks document contains interactive elements, you'll need to copy the JavaScript code as well.

JavaScript code is surrounded by `<SCRIPT>` tags and is located in the `<HEAD>` section of the document. Copy and paste the entire `<SCRIPT>` section, unless your destination document already has a `<SCRIPT>` section. In this case you should copy and paste only the contents of the `<SCRIPT>` section into the existing `<SCRIPT>` section, being careful not to overwrite the contents of the existing section. Also ensure there are no duplicate JavaScript functions in the `<SCRIPT>` section after you paste the code.

Updating exported HTML

The Update HTML command allows you to make changes to a Fireworks HTML document you've previously exported. This feature is useful if you want to update only a portion of a document.

Note: Update HTML works differently with Macromedia Dreamweaver documents than it does with other HTML documents. For more information, see "Working with Macromedia Dreamweaver MX 2004" in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

When updating Fireworks HTML, you can choose to replace just the images that changed, or overwrite all code and images. If you choose to replace only the images that changed, any changes you made to the HTML file outside of Fireworks are preserved.

Note: For considerable changes to document layout, make your changes in Fireworks and re-export the HTML file.

To update HTML using the Update HTML command:

- 1 Do one of the following:
 - Choose File > Update HTML.
 - Click the Quick Export button and choose Update HTML from the pop-up menu.
- 2 Select the file to update in the Locate HTML File dialog box.
- 3 Click Open.
- 4 If no Fireworks-generated HTML is found, click OK to insert new HTML at the end of the document.
- 5 If Fireworks-generated HTML is found, choose one of the following and click OK:
 - Replace Images and Their HTML** replaces the previous Fireworks HTML.
 - Update Images Only** overwrites only the images.
- 6 If the Select Images Folder dialog box appears, choose a folder and click Open.

Exporting CSS layers

Cascading Style Sheets (CSS) give you added control over how web pages are displayed. CSS layers let you create style sheets or templates that define how different elements, such as headers and links, should appear. With CSS, you can control the style and layout of multiple web pages at once. CSS layers can overlap and be stacked on top of one another. In Fireworks, normal HTML output does not overlap.

To export a graphic in CSS layers:

- 1 Choose File > Export.
- 2 In the Export dialog box, type a filename and choose a destination folder.
- 3 Choose CSS Layers from the Save As Type pop-up menu.
- 4 In the Source pop-up menu, choose one of the following:
 - Fireworks Layers** exports all layers as CSS layers.
 - Fireworks Frames** exports all frames as CSS layers.
 - Fireworks Slices** exports the slices in the document as CSS layers.
- 5 Select Trim Images to automatically crop the exported images and layers to fit the objects.
- 6 Select Put Images in Subfolder to choose a folder for images.
- 7 Click Save.

Exporting XHTML

In the not-too-distant future, XHTML is expected to replace HTML as the standard for displaying web content. Not only is XHTML backward-compatible—meaning that most current web browsers can view it—but it can also be read by any device that displays XML content, such as PDAs, mobile phones, and other handheld devices.

XHTML is a combination of HTML, the current standard for formatting and displaying web pages, and XML (Extensible Markup Language). XHTML contains the elements of HTML while adhering to the more strict syntax rules of XML.

To support this standard, Fireworks allows you to export XHTML.

Note: Fireworks can also import XHTML. For more information, see Fireworks Help.

For more information on XHTML, visit the World Wide Web Consortium (W3C) XHTML specification at www.w3.org.

To export XHTML from Fireworks:

- 1 Choose File > HTML Setup, choose an XHTML style from the HTML Style pop-up menu on the General tab, and click OK.
- 2 Export your document using any of the methods available for exporting or copying HTML. For more information about the various ways you can export and copy HTML from Fireworks, see [“Exporting HTML” on page 252](#).

Note: Fireworks uses UTF-8 encoding when exporting to XHTML. For more information about UTF-8 encoding, see [“Exporting files with UTF-8 encoding” on page 259](#).

Exporting files with UTF-8 encoding

Historically, web browsers were not able to display different character sets in a single HTML document. For example, Chinese text and English text could not be displayed on the same page because web browsers weren’t capable of displaying different character sets in a single document.

UTF-8, which stands for Universal Character Set Transformation Format-8, is a text-encoding method that allows web browsers to display different character sets on the same HTML page. Fireworks allows you to export HTML with UTF-8 encoding.

Note: Fireworks can also import documents that use UTF-8 encoding. For more information, see Fireworks Help.

To export documents with UTF-8 encoding:

- 1 Choose File > HTML Setup, choose Use UTF-8 Encoding on the Document Specific tab, and click OK.

Note: For more information on HTML setup options, see [“Setting HTML export options” on page 259](#).

- 2 Export your document using any of the methods available for exporting or copying HTML. For information about the various ways you can export and copy HTML from Fireworks, see [“Exporting HTML” on page 252](#).

Setting HTML export options

The HTML Setup dialog box allows you to define how Fireworks exports HTML. These settings can be document-specific or can be used as your default setting for all HTML exports. Changes made in the Document Specific tab affect the current document only, but you can use these settings as defaults for new documents if you click the Set Defaults button before closing the HTML Setup dialog box. General and Table settings are global preferences and affect all new documents.

To define how Fireworks exports HTML:

- 1 Choose File > HTML Setup or click the Options button in the Export dialog box.
- 2 In the General tab, choose from the following options:
 - Choose an HTML Style to set the style for exported HTML.

Generic HTML works in any HTML editor. However, if your document contains behaviors or other interactive content, choose your specific editor if it appears in the list. Interactive elements export differently from Fireworks depending on the selected HTML style.

To export your document using the XHTML standard, choose the appropriate XHTML style from the pop-up menu. For more information about XHTML, see [“Exporting XHTML” on page 258](#).

- Choose a file extension from the Extension pop-up menu or enter a new one.
- Choose Include HTML Comments to include comments regarding where to copy and paste in the HTML. This option is recommended if your document contains interactive elements such as buttons, behaviors, or rollover images. HTML comments help you determine which parts of the code to copy and paste.
- Choose Lowercase File Name to make the name of the HTML file and the associated image files lowercase on export.

Note: This will not lowercase the HTML file’s extension if an uppercase extension was selected in the Extension pop-up menu.

- Choose an associated application from the File Creator pop-up menu (Macintosh). When you double-click the exported HTML file on your hard disk, it automatically opens in the application you specified.
- 3 In the Table tab, choose settings for your HTML tables. For information on defining properties for exported Fireworks HTML tables, see [“Defining how HTML tables are exported” on page 183](#).
 - 4 In the Document Specific tab, choose from the following options:
 - Choose a formula for auto-naming slices in the Slice Auto-Naming pop-up menus. You can use the default settings, or choose your own options.

Note: Use caution when choosing None as a menu option for slice auto-naming. If you choose None as the option for any of the first three menus, Fireworks exports slice files that overwrite one another, resulting in a single exported graphic and a table that displays this graphic in every cell.

 - Enter text in the Alternate Image Description text box. This alt text appears in place of all images while they are downloading from the web and in place of any images that fail to download. In some browsers it may also appear as a tooltip when the pointer passes over the image. This is also an aid for vision-impaired web users.
 - Choose Multiple Nav Bar HTML Pages when exporting a navigation bar that links several pages together. When this option is chosen, Fireworks exports additional pages for each button in the navigation bar.
 - Choose UTF-8 Encoding if your document displays characters from multiple character sets. For more information about UTF-8 encoding, see [“Exporting files with UTF-8 encoding” on page 259](#).
 - 5 Click Set Defaults to save these settings as your global default settings.
 - 6 Click OK.

Using the Quick Export button



The Quick Export button, located in the upper right corner of the Document window, offers easy access to common options for exporting Fireworks files to other applications. Using the Quick Export button, you can export to a variety of formats, including Macromedia applications and other applications, such as Microsoft FrontPage and Adobe GoLive®.

All the export options available through the Quick Export button are also available elsewhere in Fireworks, such as the Export dialog box and the Edit menu. The Quick Export button provides a shortcut to the most common export options. For more information on exporting to each format, see *Working with Other Applications* on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

For most formats, several export methods are available. You can export Dreamweaver HTML, for example, or update existing Dreamweaver HTML. Or you can copy Dreamweaver HTML to the Clipboard. You can export a Flash SWF file or copy selected objects as vectors.

You can even use the Quick Export button to start other applications, as well as preview Fireworks documents in a preferred browser. By streamlining the export process, the Quick Export button saves time and improves the design workflow.

Note: The Quick Export button exports graphics and slices using the settings you specify in the Optimize panel. Be sure to optimize your graphic before exporting with the Quick Export button. For more information on optimization, see [“About optimizing” on page 226](#).

To export a Fireworks document or selected graphics using the Quick Export button:

- 1 Click the Quick Export button and choose an export option from the pop-up menu displayed. The appropriate options are automatically set for you in the Export dialog box. Make changes to the options if desired.
- 2 Choose a location to store the exported files, type a filename, and click Save.

To start another Macromedia application using the Quick Export button:

- Click the Quick Export button and choose the Launch option from the application submenu.

Customizing the Quick Export pop-up menu

You can add additional options to the Quick Export pop-up menu if you know JavaScript and XML.

To add options to the Quick Export pop-up menu:

- 1 Create your own JSF files and drop them into the Quick Export Menu folder on your hard disk.

Note: The exact location of this folder varies depending on your operating system. The Quick Export Menu folder is located in the English subfolder of the Fireworks application folder on Windows systems. On Macintosh systems, this folder is located in the Contents/Resources/English.lproj folder in the Fireworks application package. For more information about application packages, see [“Viewing package contents \(Macintosh only\)” on page 287](#).

- 2 Edit the Quick Export Menu.xml file by including references to the new JSF files.

The next time you start Fireworks, the new options you created are added to the Quick Export pop-up menu. For more information, see *Extending Fireworks*.

Sending a Fireworks document as an e-mail attachment

You can easily send documents as e-mail attachments from within Fireworks. You can send a Fireworks PNG, a compressed JPEG, or a document using other file formats and optimization settings available in the Optimize panel.

To send a document as an e-mail attachment using your default e-mail client:

- 1 Choose File > Send to E-mail.
- 2 Select one of the following options:

Fireworks PNG attaches the current PNG document to a new e-mail message.

JPG Compressed attaches the current document to a new e-mail message using the JPEG - Better Quality optimization setting.

Use Export Settings attaches the current document to an e-mail message using the settings defined in the Optimize panel.

Note: Mozilla, Netscape 6, and Nisus Emler are not supported on the Macintosh.

Using the File Management button



The File Management button, located at the top of the Document window next to the Quick Export button, offers easy access to file-transport commands. You can use the File Management button if your document lives in a Studio MX 2004 site folder and if the site has access to a remote server. Fireworks recognizes your folder as a site if you have used the Manage Site dialog box in Dreamweaver MX 2004 to define the target folder, or a folder that contains the target folder, as the local root folder for a site.

The File Management button displays the following menu commands:

Get copies the remote version of the file to the local site, overwriting the local file with the remote copy.

Check Out checks the file out, overwriting the local file with the remote copy. Check Out is enabled in Fireworks only if the Enable File Check In and Check Out option is enabled in Dreamweaver for the site in which the document lives.

Put copies the local version of the file to the remote site, overwriting the remote file with the local copy.

Check In checks the local file in, overwriting the remote file with the local copy. Check In is enabled in Fireworks only if the Enable File Check In and Check Out option is enabled in Dreamweaver for the site in which the document lives.

Undo Check Out undoes Check Out of the local file and checks it in, overwriting the local file with the remote copy. Undo Check Out is enabled in Fireworks only if the Enable File Check In and Check Out option is enabled in Dreamweaver for the site in which the document lives.

Note: File Management commands are enabled in Fireworks only if your document lives in a Studio MX 2004 site folder with a remote server defined. Fireworks File Management commands can be used only for files that live in sites that use the Local/Network and FTP transport methods. Files in sites that uses FTP or third-party transport methods such as SourceSafe, WebDAV, and RDS cannot be transported to and from the remote server from within Fireworks.

For more information about the File Management menu, see “Working with Macromedia Dreamweaver MX 2004” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

CHAPTER 13

Automating Repetitive Tasks

Web designers often spend lots of time doing repetitive tasks, such as optimizing images or converting images to fit within certain constraints. Part of the power of Macromedia Fireworks MX 2004 is its capability to automate and simplify many tedious drawing, editing, and file-conversion tasks.

To speed up your editing process, you can use Find and Replace to search for and replace elements within a file or elements from multiple files. You can find and replace elements such as URLs, fonts, color, text, and commands created in the History panel.

You can use the Batch Process feature to convert entire groups of image files into other formats or to change their color palettes. Batch Process can apply custom optimization settings to groups of files. You can also resize a group of files, making Batch Process an ideal tool for creating thumbnails.

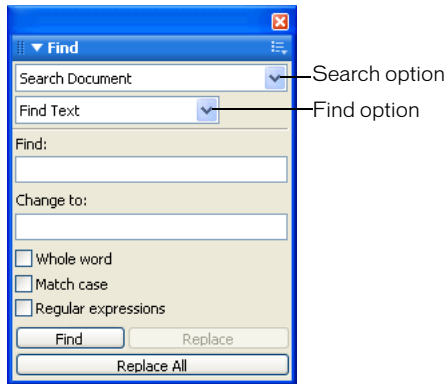
Using the History panel, you can create commands that are shortcuts for commonly used features or create a script that can perform a complex series of steps. Fireworks can understand and execute JavaScript, so advanced users can automate very complex tasks by writing JavaScript commands and then executing them in Fireworks. You can control nearly every Fireworks command or setting through JavaScript using special JavaScript commands that Fireworks can interpret.

The Extension Manager lets you import, install, and delete extensions in Macromedia applications to extend the capabilities of Fireworks.

Finding and replacing

The Find and Replace feature helps you search for and replace elements, such as text, URLs, fonts, and colors. Find and Replace can search the current document or multiple files.

Find and Replace works only in Fireworks PNG files or in files containing vector objects, such as FreeHand, uncompressed CorelDraw, and Illustrator files.



Find panel

To select the source for the search:

- 1 Open the document.
- 2 Do one of the following to open the Find panel:
 - Choose Window > Find.
 - Choose Edit > Find.
 - Press Control+F (Windows) or Command+F (Macintosh).

Note: If the files you select are locked or checked in from a Macromedia Dreamweaver site, you are prompted to unlock them or check them out before proceeding.

- 3 From the Search pop-up menu, choose a source for the search:

Search Selection finds and replaces elements only among the currently selected objects and text.

Search Frame finds and replaces elements only in the current frame.

Search Document finds and replaces elements in the active document.

Search Files finds and replaces elements across multiple files. If this option is not already chosen in the Search pop-up menu, choosing it opens a dialog box in which you can choose which files to search. If Search Files is already selected in the Search pop-up menu, you have the option to choose which files to search after you begin the search operation by clicking Find, Replace, or Replace All.

- 4 From the Find pop-up menu, choose an attribute to search for. The options in the panel change according to your selection.

- 5 Set the options for the selected Find attribute.
 - 6 Choose a find-and-replace operation:
 - Find** locates the next instance of the element. Found elements appear selected in the document.
 - Replace** changes a found element with the contents of the Change To option.
 - Replace All** finds and replaces every occurrence of a found element throughout the search range.
- Note:** Replacing objects in multiple files automatically saves those files; you cannot reverse the change using Edit > Undo. For more information, see [“Finding and replacing during a batch process” on page 271](#).

Setting options for finding and replacing in multiple files

When finding and replacing among multiple files, you can determine how Fireworks handles multiple open files after the search.

To save, close, and back up each file after it is searched:

- 1 Choose Replace Options from the Find panel Options menu.
 - 2 Choose Save and Close Files to save and close each file after the find and replace.
 - Only the originally active documents remain open.
- Note:** If Save and Close is disabled and you are batch-processing a large number of files, Fireworks may run out of memory and cancel the batch process.
- 3 Choose one of the following from the Backups pop-up menu:
 - No Backups** finds and replaces without backing up original files. The changed files replace the original files.
 - Overwrite Existing Backups** creates and stores only one backup copy of each file changed during a find and replace. If you perform additional find-and-replace operations, the previous original file always replaces the backup copy. The backup copies are stored in a subfolder called Original Files.
 - Incremental Backups** saves all backup copies of files changed during a find and replace. The original files are moved to an Original Files subfolder within their current folder, and an incremental number is appended to each filename. If you perform additional find-and-replace operations, the original file is copied to the Original Files folder, and the next higher number is added to its filename. For example, for a file named Drawing.png, the first time you find and replace, the backup file is named Drawing-1.png. The second time you find and replace, the backup file is named Drawing-2.png, and so on.
 - 4 Click OK.

Finding and replacing text

Fireworks makes it easy to search for and replace text. You have a variety of options to refine your search to consider case or to find entire words or parts of words.

To search for and replace words, phrases, or text strings:

- 1 Choose Find Text from the Find pop-up menu of the Find panel.
- 2 Enter the text to search for in the Find text box.
- 3 Enter the replacement text in the Change To text box.
- 4 If you want, choose options to further define the search:

Whole Word finds the text only in the same form in which it appears in the Find option, not as part of any other word.

Match Case distinguishes between uppercase and lowercase letters during the search.

Regular Expressions matches parts of words or numbers conditionally during a search.

Finding and replacing fonts

You can also quickly find and replace fonts in your Fireworks documents.

To search for and replace fonts in one or more Fireworks documents:

- 1 Choose Find Font from the Find pop-up menu of the Find panel.
- 2 Choose the font and font style to find.

Tip: You can restrict your search by minimum and maximum point sizes.

- 3 Specify the font, font style, and point size to use as a replacement in the Change To area.

Finding and replacing colors

You can find all instances of a certain color in your Fireworks documents and then change it to something else.

To search for and replace colors in Fireworks documents:

- 1 Choose Find Color from the Find pop-up menu.
- 2 Choose an item from the Apply To pop-up menu to determine how the colors found are applied:

Fills & Strokes finds and replaces both fill and stroke colors.

All Properties finds and replaces fill, stroke, and effect colors.

Fills finds and replaces a fill color, except within pattern fills.

Strokes finds and replaces stroke colors only.

Effects finds and replaces effect colors only.

Finding and replacing URLs

In addition to words, typefaces, and colors, Fireworks allows you to find and replace URLs assigned to interactive elements in your documents.

To search for and replace URLs assigned to web objects:

- 1 Choose Find URL from the Find pop-up menu of the Find panel.
- 2 Enter the URL to search for in the Find text box.
- 3 Enter the replacement URL in the Change To text box.
- 4 If you want, choose options to further define the search:

Whole Word finds the text only in the same form in which it appears in the Find option, not as part of any other word.

Match Case distinguishes between uppercase and lowercase letters during the search.

Regular Expressions matches parts of words or numbers conditionally during a search.

Finding and replacing non-websafe colors

A non-websafe color is a color not included in the Web216 color palette. A color is websafe if it dependably appears to be the same color on both Macintosh and Windows platforms. For more information about websafe colors, see [“Optimizing GIF, PNG, TIFF, BMP, and PICT files” on page 235](#).

To search for all non-websafe colors and replace them with websafe colors:

- Choose Find Non-Web216 from the Find pop-up menu of the Find panel.

Note: Find Non-Web216 does not find or replace pixels within image objects.

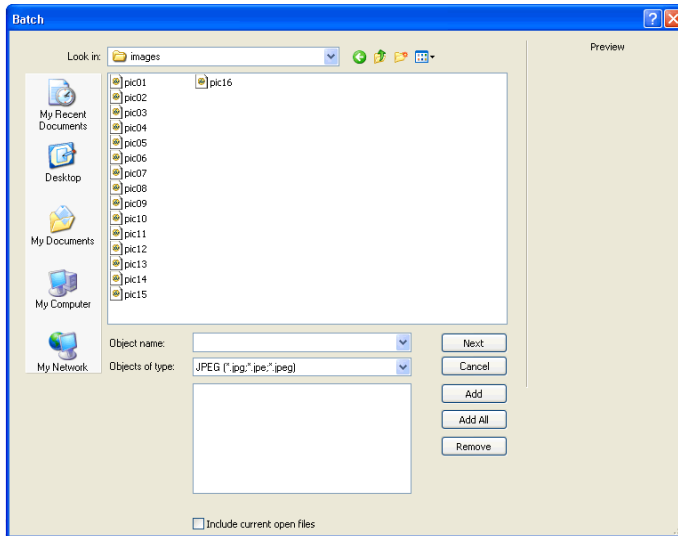
Batch processing

Batch processing is a convenient way to automatically convert a group of graphic files. These are the batch-processing options:

- Convert a selection of files to another format.
- Convert a selection of files to the same format with different optimization settings.
- Scale exported files.
- Find and replace text, colors, URLs, fonts, and non-Web216 colors.
- Rename groups of files by adding a prefix or suffix.
- Perform commands on a selection of files.

To batch-process files:

- 1 Choose File > Batch Process, and select the files to process. You can select files from different folders or group them by file type.



Note: If the files you select are locked or checked in from a Dreamweaver site, you are prompted to unlock them or check them out before proceeding.

- 2 Click one of the following in the Batch (Windows) or Batch Process (Macintosh) dialog box:
Add adds selected files and folders to the list of files to batch-process. If a folder is selected, all valid, readable files in the folder are added to the batch process.

Note: Valid files are files that have been created, named, and saved. If the latest file version is not saved, you are asked to save it, and you can then continue the batch process. If you don't save the file, the entire batch process ends.

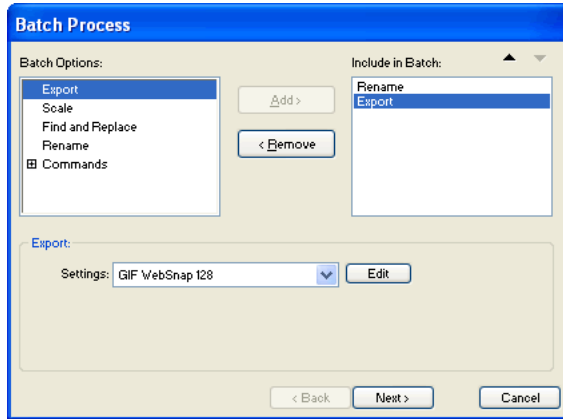
Add All adds all valid files in the currently selected folder to the list of files to batch-process.

Remove removes selected files from the list of files to batch-process.

- 3 Choose Include Current Open Files to add all currently open files.
These files do not appear in the list of files to batch-process, but they are included in the process.

4 Click Next, then do one or both of the following:

- To add a task to the batch, select it in the Batch Options list and click Add. Each task can be added only once. For more information on adding commands, see [“Performing commands with a batch process” on page 272](#).



- To reorder the list, select the task in the Include in Batch list and click the up and down arrow buttons.



Note: The order in which tasks appear in the Include in Batch list is the order in which the tasks are performed during the batch process, with the exception of Export, which is always performed last.

5 To view extra options for a task, select the task in the Include in Batch list.

6 Choose settings for each option as required.

To remove a task from the batch, select the task in the Include in Batch list and click Remove.

7 Click Next.

8 Choose options for saving processed files:

Same Location as Original File saves the file in the same location as its source file and overwrites the source file if the filenames are the same and in the same format.

Custom Location lets you choose a location in which to save the processed files.

9 Select Backups to choose backup options for the original files.

It is always safer to back up files. For more information, see [“Specifying the batch process output location” on page 273](#).

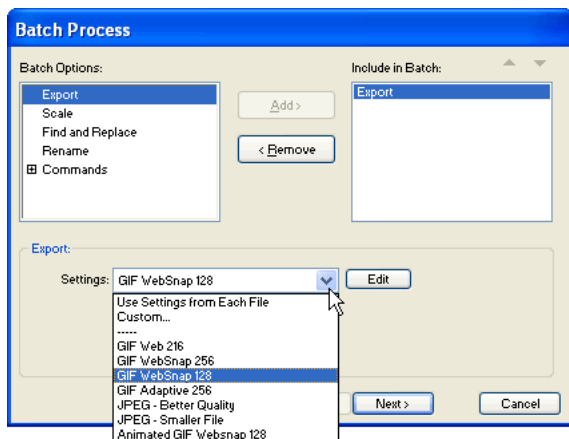
10 Click Save Script if you want to save the batch process settings for future use.

For more information, see [“Saving batch processes as scripts” on page 274](#).

11 Click Batch to perform your batch process.

Changing optimization settings with a batch process

You can change file optimization settings using the Export option in the Batch Process dialog box.



To set export settings for a batch process:

- 1 Choose Export from the Batch Options list and click Add.
- 2 From the Settings pop-up menu, choose from the following options and click OK:
 - Choose Use Settings from Each File to keep each file's previous export settings during the batch process. For example, when you batch-process a folder of GIFs and JPEGs, the resulting files remain GIFs and JPEGs, and Fireworks uses the original palette and compression settings when exporting each file.
 - Choose Custom or click Edit to change settings in the Export Preview dialog box.
 - Choose a preset export setting such as GIF Web216 or JPEG – Better Quality. All files are converted to this setting.
- 3 Click Next to continue the batch process.

For information on completing the batch process, see [“Batch processing” on page 267](#).

Scaling graphics with a batch process

You can alter the height and width of images being exported using the Scale option in the Batch Process dialog box.

To set scaling options for batch-processed files:

- 1 Choose Scale from the Batch Options list and click Add.
- 2 In the Scale pop-up menu, choose an option:

No Scaling exports files unaltered.

Scale to Size scales images to the exact width and height you specify.

Scale to Fit Area makes images fit proportionally with the maximum width and height range you specify.

Tip: Use Scale to Fit Area to convert a group of images to uniformly sized thumbnail images.

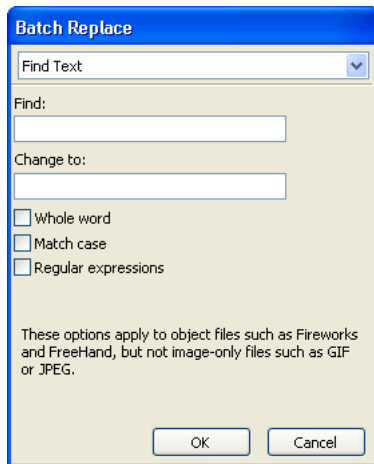
Scale to Percentage scales images by a percentage.

- 3 Click Next to continue the batch process.

For information on completing the batch process, see [“Batch processing” on page 267](#).

Finding and replacing during a batch process

You can find and replace text, fonts, colors, or URLs in buttons, hotspots, or slices using the Find and Replace option in the Batch Process dialog box.



Batch Replace affects only the following file formats: Fireworks PNG, Illustrator, FreeHand, and CorelDraw. Batch Replace does not affect GIFs and JPEGs.

To select attributes to find and replace during a batch process:

- 1 Choose Find and Replace from the Batch Options list and click Add.
- 2 Click Edit.
- 3 Select the type of attribute to find and replace from the Find pop-up menu: text, font, color, URL, or Non-Web216.
- 4 Enter or select the specific element to find in the Find box.
- 5 Enter or select the specific element to replace in the Change To box.
- 6 Click OK to store Find and Replace settings.
- 7 Click Next to continue the batch process.

For information on completing the batch process, see [“Batch processing” on page 267](#). For more information about Find and Replace options, see [“Finding and replacing” on page 264](#).

Changing filenames with a batch process

You can change the names of files being processed using the Rename option in the Batch Process dialog box.

To set naming options for batch-processed files:

- 1 Choose Rename from the Batch Options list and click Add.
- 2 Choose an option from the Rename pop-up menu:

Original Name leaves filenames unchanged.

Add Prefix lets you enter text to add to the beginning of the filename. For example, if you enter “night_”, then the file Sunrise.gif is renamed night_Sunrise.gif when it is batch processed.

Add Suffix lets you enter text to add to the end of the filename before the file extension. For example, if you enter “_day”, then the file Sunset.gif is renamed Sunset_day.gif when it is batch-processed.

- 3 Click Next to continue the batch process.

For information on completing the batch process, see [“Batch processing” on page 267](#).

Performing commands with a batch process

You can perform JavaScript commands on files using the Commands option in the Batch Process dialog box.

To set command options for batch-processed files:

- 1 Click the Plus (+) button (Windows) or the triangle (Macintosh) beside the Commands option in the Batch Options list to view the available commands.
- 2 Select a command and click Add to add it to the Include in Batch list.

Note: These commands cannot be edited.

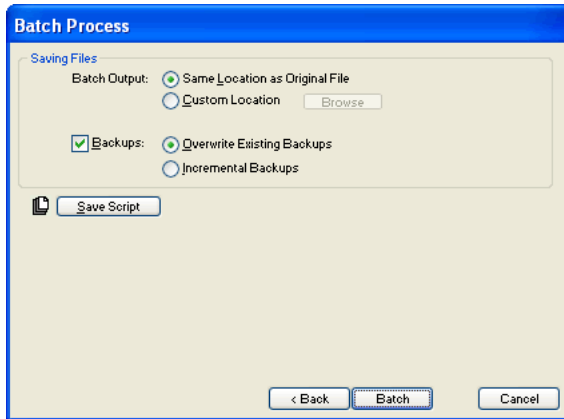
- 3 Click Next to continue the batch process.

For information on completing the batch process, see [“Batch processing” on page 267](#). For more information on creating commands, see [“Scripting with the History panel” on page 276](#).

Note: Some commands do not work during a batch process. Choose commands that work within the document without requiring any object to be selected.

Specifying the batch process output location

After you choose all batch options in the Batch Process dialog box, you must choose options for saving your files. You can save backup copies of the original files from a batch process. Backup copies of files are placed in an Original Files subfolder in the same folder as each original file.



To back up batch-processed files:

- 1 Choose a location for the batch output.
- 2 Choose Backups to set your backup options.
- 3 Choose how you want to back up the files:

Overwrite Existing Backups overwrites the previous backup file.

Incremental Backups keeps copies of all the backup files. When you run a new batch process, a number is appended to the end of the filename of the new backup copy.

Note: If Backup is deselected, batch processing in the same file format overwrites the original file if the name is the same. However, batch processing in a different file format creates a new file and does not move or delete the original file.

- 4 Click Batch to finish the batch process, or click Back to return to the Batch Process dialog box.

Saving batch processes as scripts

You can save batch process settings as a script or command to re-create the batch process easily in the future. After you choose all batch options in the Batch dialog box, you are given options for saving your files.

To create a batch script:

- 1 Click Save Script to create a batch script.
- 2 Enter a name and destination for the script.
- 3 Click Save.

Saving your script into the Commands folder on your hard disk adds it to the Commands menu in Fireworks.

Note: The exact location of this folder varies from system to system and depends on whether you want the command to be available just to your user profile or to all users. Commands folders are located in the Configuration folder in the Fireworks application folder and also in your user-specific Fireworks configuration folder. For more information, see [“Working with configuration files” on page 286](#).

To run a batch script:

- 1 Do one of the following:
 - In Fireworks, choose Commands > Run Script.
 - Outside Fireworks, double-click the script filename on your hard disk.
- 2 Select a script and click Open.
- 3 Choose the files to process with the script:

Current Open Files processes all open documents.

Custom lets you select files to process.

Note: Click the Ellipsis (...) button beside the Files to Process pop-up menu to select files to process.

- 4 Click OK.

For more information on choosing files, see [“Batch processing” on page 267](#).

Running scripts by dragging and dropping

If you have a batch process that you repeat frequently, save it as a script, then drag that script from your hard drive to the Fireworks icon on your desktop to run the batch process. The Fireworks application launches and runs that script.

To run a script by dragging and dropping:

- 1 Save a script.
- 2 Do one of the following:
 - Drag the script file icon onto the Fireworks desktop icon.
 - Drag the script file icon into an open Fireworks document.

Note: Dragging multiple script files and multiple graphic files into Fireworks processes the graphic files multiple times, once for each script.

Extending Fireworks

Extending Fireworks has never been easier. Fireworks offers a variety of different ways you can create custom commands that enhance its capabilities.

With the Extension Manager, you can install and manage extensions that augment the functionality of Fireworks. Or you can write custom JavaScript code and use it as a custom command in Fireworks. You can also use Flash SWF movies as custom commands in Fireworks. In addition, the Fireworks History panel provides an easy-to-use interface that allows you to create custom commands from a series of recorded tasks.

After you install an extension or create a custom command, Fireworks places it in the Commands menu.

Note: If stored as a SWF file in the Command Panels folder on your hard disk, commands are available as panels in the Window menu. For more information, see [“About scripting with Flash SWF files” on page 278](#).

Using the Macromedia Extension Manager

An extension is a command script, command panel, library, filter, pattern, texture, or Auto Shape that can be added to Fireworks to enhance its capabilities. Fireworks ships with the Macromedia Extension Manager, which allows you to easily install, manage, and delete extensions. Upon installation, Fireworks includes a collection of default extensions in the Commands menu.

You can also use the Extension Manager to bundle your own extensions and send them to the Macromedia Exchange for Fireworks. Through the Exchange, you can share your extensions with other Fireworks users.

Third-party extensions are stored in subfolders (depending upon the type of extension) in the Configuration folder in the Fireworks application folder on your hard disk.

Commands that you create and save using the History panel are stored in your user's Commands folder. For information on the location of this folder, see [“About user configuration files” on page 286](#).

To open the Extension Manager from within Fireworks, do one of the following:

- Choose Commands > Manage Extensions.
- Choose Help > Manage Extensions.

For more information about using the Extension Manager, see Extension Manager Help.

To visit the Macromedia Fireworks Exchange:

- From within Fireworks, choose Help > Fireworks Exchange.
- Browse to www.macromedia.com/go/fireworks_exchange in your web browser.

Scripting with the History panel

The History panel records a list of the steps you have performed while working in Fireworks. Each step is stored on a separate line of the History panel, starting with the most recent. By default, the panel remembers 20 steps. However, you can change this value at any time.

Creating commands

You can save groups of steps in the History panel as a command that you can reuse. You can execute saved commands in any Fireworks document. They are not document-specific.

Saved commands are stored as JSF files in the Commands folder in your user-specific Fireworks configuration folder. For information on the location of this folder, see [“About user configuration files” on page 286](#).

To save steps as a command:

- 1 Choose the steps to save as a command:
 - Click a step, then Shift-click another to select a range of steps to save as a command.
 - Control-click (Windows) or Command-click (Macintosh) to select noncontiguous steps.
- 2 Click the Save Steps as Command button at the bottom of the History panel.
- 3 Enter a name for the command and click OK.

The command appears on the Commands menu.

To undo or redo steps using the History panel:

- Drag the Undo Marker up the panel until you reach the last step you want to undo or redo.
- Click along the Undo Marker track on the left of the History panel.

Note: Undone steps remain in the History panel highlighted in gray.

To change the number of steps the History panel remembers:

- 1 Choose Edit > Preferences (Windows) or Fireworks > Preferences (Macintosh).
- 2 Change Undo Steps to the number of steps you want the History panel to record.

Note: Additional steps require more computer memory.

To clear all steps from the History panel:

- Choose Clear History from the History panel Options menu.

This frees memory and disk space.

Note: Clearing actions from the History panel removes your ability to undo edits.

Playing commands

You can execute recorded commands or a selection of actions in the History panel at any time.

To play back a saved command:

- 1 If necessary, select one or more objects.
- 2 Choose the command from the Commands menu.

To replay a selection of steps:

- 1 Select one or more objects.
- 2 Choose the steps in the History panel.
- 3 Click the Replay button at the bottom of the History panel.

Steps marked with an X are nonrepeatable and cannot be played back. Separator lines indicate that a different object has become selected. Commands created from steps that cross a separator line can produce unpredictable results.

To apply selected steps to objects in many documents:

- 1 Select a range of steps.
- 2 Click the Copy Steps to Clipboard button at the bottom of the History panel.
- 3 Select one or more objects in any Fireworks document.
- 4 Choose Edit > Paste.

To repeat the last step:

- Choose Edit > Repeat Command Script.

About scripting with JavaScript

You can reduce the tedium of some repetitive tasks by writing your own JavaScript in a text editor to run within Fireworks. You can control nearly every command or setting in Fireworks through JavaScript.

Macromedia Dreamweaver also uses JavaScript. You can write scripts that control Fireworks from within Dreamweaver.

For documentation on the JavaScript API, see *Extending Fireworks*.

About scripting with Flash SWF files

With Flash, you can create SWF movies that contain JavaScript code. These movies can be used as Fireworks commands, accessible from the Commands menu in Fireworks.

You can even create a SWF movie and use it as a Fireworks panel, accessible from the Window menu. The Align panel in Fireworks is an example of a Flash movie imported as a panel.

SWF movies that are used as commands are stored in the Commands folder on your hard disk, and SWF movies that are used as panels are stored in the Command Panels folder.

Note: The exact location of these folders varies from system to system and depends on whether you want the command or panel to be available just to your user profile or to all users. Commands and Command Panels folders are located in the Configuration folder in the Fireworks application folder and also in your user-specific Fireworks configuration folder. For more information, see [“Working with configuration files” on page 286](#).

For more detailed instructions about creating commands or panels from Flash SWF movies, see *Extending Fireworks*.

Managing commands

You can rename or delete any commands that appear in the Commands menu.

You can rename or delete any commands that you create using the Manage Saved Commands option in Fireworks. You must use the Extension Manager for other commands and extensions that were installed with Fireworks or that you downloaded and installed from the Macromedia Exchange website.

To rename a custom command that you created:

- 1 Choose Commands > Manage Saved Commands.
- 2 Select the command.
- 3 Click Rename, enter a new name, and click OK.

To delete a custom command that you created, do one of the following:

- In Fireworks, choose Commands > Manage Saved Commands. Then select the command and click Delete.
- On your hard disk, delete the JSF file for the command from the Commands folder in your user-specific Fireworks configuration folder. For information on locating this folder, see [“About user configuration files” on page 286](#).

To rename or delete a command that shipped with Fireworks or that you downloaded from the Macromedia Exchange:

- Choose Command > Manage Extensions.
- Choose Help > Manage Extensions.

The Extension Manager opens. For information about how to manage extensions, see Extension Manager Help.

Editing or customizing a command script

Command scripts are saved as JavaScript. If you know JavaScript, you can open and edit commands in any text editor, such as Notepad (Windows) or TextEdit (Macintosh).

To edit a command using JavaScript:

- 1 From your desktop, navigate to the appropriate Commands or Command Panels folder on your hard disk.

Note: The exact location of these folders varies from system to system and depends on whether you want the command or panel to be available just to your user profile or to all users. Commands and Command Panels folders are located in the Configuration folder in the Fireworks application folder and also in your user-specific Fireworks configuration folder. For more information, see [“Working with configuration files” on page 286](#).

- 2 Open the desired script file in a text editor and modify the JavaScript code.
- 3 Save and close the script.

To edit selected actions from the History panel using JavaScript:

- 1 In Fireworks, select a range of steps in the History panel.
- 2 Click the Copy Steps to Clipboard button at the bottom of the History panel.
- 3 Create a new document in a text-editing application.
- 4 Paste the steps into the new text document.
- 5 Modify the steps as desired.
- 6 Save and close the script.
- 7 Copy the script to the Commands folder on your hard disk.

Note: The exact location of this folder varies from system to system and depends on whether you want the command to be available just to your user profile or to all users. Commands folders are located in the Configuration folder in the Fireworks application folder and also in your user-specific Fireworks configuration folder. For more information, see [“Working with configuration files” on page 286](#).

Commands saved directly into the Commands folder, as well as those saved in the History panel, appear in the Commands menu as soon as you save them, so restarting Fireworks is not necessary. However, commands saved in the Command Panels folder will be available in the Window menu only after you restart Fireworks.

CHAPTER 14

Preferences and Keyboard Shortcuts

Macromedia Fireworks MX 2004 preference settings let you control the general appearance of the user interface, as well as editing and folder aspects. In addition, Fireworks allows you to customize your keyboard shortcuts. This means that you can customize your shortcuts and standardize them among your favorite software programs.

Setting preferences

Fireworks has preference settings that control the general appearance of the user interface as well as options related to specific features such as default colors, tool options, folder locations, and file conversions.

To set preferences:

- 1 Choose Edit > Preferences (Windows) or Fireworks > Preferences (Macintosh).
- 2 Select the preferences group you wish to modify: General, Editing, Launch and Edit, Folders, or Import.
- 3 Make your changes and click OK.

General preferences

The following options are on the General preferences tab:

Undo Steps sets undo/redo steps to a number between 0 and 1009. This setting applies to both the Edit > Undo command and the History panel. A large number of undos can increase the amount of memory Fireworks requires. You must restart Fireworks for the change in this setting to take effect.

Color Defaults sets the default colors for brush strokes, fills, and highlight paths. The Stroke and Fill options do not automatically change the colors displayed in the color boxes of the Tools panel; they allow you to change the default colors that are specified by the Set Default Stroke/Fill Colors button in the Tools panel.

Interpolation sets one of four different scaling methods that Fireworks uses to interpolate pixels when images are scaled:

- Bicubic interpolation gives the sharpest and highest quality most of the time and is the default scaling method.
- Bilinear interpolation gives sharper results than Soft interpolation but not as sharp as Bicubic.

- Soft interpolation, which was used in Fireworks 1, gives a soft blur and eliminates sharp details. This method is useful when others produce unwanted artifacts.
- Nearest Neighbor interpolation results in jagged edges and sharp contrasts with no blurring. The effect is similar to zooming in or out on an image with the Zoom tool.

Workspace: Show Tab Icons is deselected by default. It allows you to display or hide the graphical icons on panel tabs that were visible in previous versions of Fireworks. This option also affects the display of the Mini-Launcher at the bottom of the Document window.

Saving files: Add Preview Icons (Macintosh only) allows you to display or hide thumbnails of Fireworks PNG files on your hard disk. Deselecting this option displays the traditional Fireworks icon used for Fireworks PNG files. This option takes effect after you save the file.

Editing preferences

The editing preferences control pointer appearance and visual cues for working with bitmap objects.

Precise Cursors replaces tool icon pointers with the cross-hair pointer.

Delete Objects While Cropping permanently deletes pixels or objects that are outside the bounding box of a selection when you choose Edit > Crop Document or Modify > Canvas > Canvas Size.

Brush Size Painting Cursors sets the size and shape of the Brush, Eraser, Blur, Sharpen, Dodge, Burn, and Smudge tool pointers to accurately reflect what you are about to draw or erase. For certain large multi-tipped brushes, the cross-hair pointer is used by default. When this option and Precise Cursors are turned off, tool icon pointers are displayed.

Display Striped Border places the familiar striped border around the entire canvas when you are working with bitmap objects (bitmap mode).

Show Pen Preview provides a preview of the next path segment that will be created if you click at that moment with the Pen tool.

Show Solid Points shows selected points as hollow and deselected points as solid.

Turn off “Hide Edges” automatically disables Hide Edges when the selection changes.

Pick Distance lets you specify how close to an object the pointer must be before you can select it. Pick Distance can be between 1 and 10 pixels.

Snap Distance lets you specify how close the object you are moving must be before it snaps to a grid or guide line. Snap Distance works when Snap to Grid or Snap to Guides is turned on. Snap Distance can be between 1 and 10 pixels.

Launch and Edit preferences

By setting launch-and-edit preferences, you can control how external applications, such as Macromedia Flash, Macromedia Director, and Microsoft FrontPage, launch and edit graphics in Fireworks.

In most cases, Fireworks attempts to locate the source PNG for a graphic on its own. When it can't locate the source PNG, Fireworks uses the launch-and-edit preferences that you set to determine how it will handle locating the source PNG file.

Note: Macromedia Flash is an exception. When launching and editing graphics in Flash, Fireworks always uses the preferences you set in the Launch and Edit section of the Preferences dialog box.

When Editing from External Application determines whether the original Fireworks PNG file opens when you use Fireworks to edit images from within other applications.

When Optimizing from External Application determines whether the original Fireworks PNG file opens when you optimize a graphic.

Note: This setting does not apply to Director, which always automatically opens and optimizes a graphic without asking for a source PNG, even if you set this preference differently in Fireworks.

For more information on working with Fireworks graphics within Flash, see “Working with Macromedia Flash MX 2004” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

For more information on working with Fireworks graphics in Director, see “Working with Macromedia Director MX” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

For more information on working with Fireworks graphics within FrontPage, see “Working with Microsoft FrontPage” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

Note: Macromedia Dreamweaver handles launch-and-edit settings differently. Dreamweaver always opens the source PNG, even if you set launch-and-edit preferences differently in Fireworks. If no Design Note exists or if the path to the source PNG is broken, Dreamweaver always prompts you to locate the source PNG file. For more information on working with Fireworks graphics and interactive elements within Dreamweaver, see “Working with Macromedia Dreamweaver MX 2004” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

Folders preferences

The folders preferences give you access to additional Photoshop plug-ins, texture files, and pattern files from external sources.

Additional Materials (Photoshop Plug-Ins, Textures, and Patterns) targets folders containing plug-ins, textures, and patterns. The folders can be in another folder on your hard disk, on a CD-ROM or other external drive, or on a network volume.

Photoshop plug-ins appear in the Fireworks Filters menu and the Property inspector’s Add Effects menu. Textures or patterns stored as PNG, JPEG, and GIF files appear as options in the Pattern and Texture pop-up menus in the Property inspector.

For more information about textures and patterns, see “[Adding texture to a fill](#)” on page 117.

Photoshop Import preferences

The preferences in the Import tab let you manage Photoshop file conversions:

- You can convert layers as objects or new frames.
- You can choose between editing imported text or maintaining its appearance.
- You can import a Photoshop file as a flattened bitmap object.

For more information on the Import preferences, see “Working with Adobe Photoshop” in Working with Other Applications on the Fireworks Support Center at www.macromedia.com/support/fireworks/.

Restoring preferences

You can restore preferences to their original settings by deleting the preferences file. The first time Fireworks is launched after the preferences file has been deleted, a new preferences file is created, restoring Fireworks to its original configuration.

To restore default preferences:

- 1 Quit Fireworks.
- 2 Locate the Fireworks MX 2004 Preferences file on your hard disk and delete it.

The exact location of this file varies from system to system. For more information, see [“Location of the Fireworks preferences file” on page 287](#).

- 3 Restart Fireworks.

Changing keyboard shortcut sets

Fireworks lets you use keyboard shortcuts to choose menu commands, choose tools from the Tools panel, and speed up miscellaneous tasks that do not exist as menu commands. Using shortcuts increases your productivity by allowing you to perform simple actions quickly. If you are accustomed to using shortcuts from other applications such as FreeHand, Illustrator, Photoshop, or products that use the Macromedia standard, you can switch to the shortcut set you prefer.

To change the current shortcut set:

- 1 Choose Edit > Keyboard Shortcuts (Windows) or Fireworks > Keyboard Shortcuts (Macintosh) to open the Keyboard Shortcuts dialog box.
- 2 Select the shortcut set you prefer from the Current Set pop-up menu and click OK.

Creating custom and secondary shortcuts

You can create your own custom keyboard shortcuts, and you can create secondary shortcuts if you need to have several different ways to perform an action. A custom shortcut set is always based on a preinstalled set.

Note: In Fireworks, shortcuts to tools cannot include modifier keys: Control, Shift, and Alt (Windows) or Command, Shift, Option, and Control (Macintosh). Tool shortcuts consist of a single letter or number key.

To create a custom or secondary shortcut for a menu command, tool, or miscellaneous action:

- 1 Choose Edit > Keyboard Shortcuts to open the Keyboard Shortcuts dialog box.
- 2 Click the Duplicate Set button.
- 3 Enter a name for the custom set in the Duplicate Set dialog box and click OK.
The name of the new custom menu appears in the Current Set text box.
- 4 Choose the appropriate shortcut category from the Commands list:
 - **Menu Commands** creates a custom shortcut for any command accessed through the menu bar.
 - **Tools** creates a custom shortcut for any tool on the Tools panel.
 - **Miscellaneous** creates a custom shortcut for a range of predefined actions.

Once selected, all possible shortcuts in the particular category appear in the Commands scroll list.

- 5 Choose the command whose shortcut you want to modify from the Commands list.
If a shortcut exists, it is displayed in the Shortcuts list.
- 6 Click in the Press Key text box, and press the desired keys for the new shortcut on the keyboard.
If the key combination you choose is already used by another shortcut, a warning message appears below the Press Key text box.
- 7 Do one of the following:
 - Click the Add a New Shortcut (+) button to add a secondary shortcut to the shortcut list.
 - Click Change to replace the selected shortcut.

Deleting custom shortcuts and custom shortcut sets

You can delete any custom shortcut or any custom shortcut set.

To delete a custom shortcut set:

- 1 Choose Edit > Keyboard Shortcuts to open the Keyboard Shortcuts dialog box.
- 2 Click the Delete Set button (trash can icon).
- 3 Choose the shortcut set you want to delete from the Delete Set dialog box.
- 4 Click the Delete button.

To delete a custom shortcut:

- 1 Choose the command in the Commands list.
- 2 Choose the custom shortcut from the Shortcuts list.
- 3 Click the Delete a Selected Shortcut (-) button.

Creating a reference sheet for the current shortcut set

A reference sheet is a record of the current shortcut set stored in HTML table format. You can view the reference sheet in a web browser or print it.

Note: Reference sheets exported from Fireworks are UTF-8 encoded.

To create a reference sheet:

- 1 Choose Edit > Keyboard Shortcuts to open the Keyboard Shortcuts dialog box.
- 2 Click the Export Set as HTML button beside the Current Set text box.
The Save As (Windows) or Save (Macintosh) dialog box is displayed.
- 3 Enter the name for the reference sheet, and select the appropriate location for the file.
- 4 Click Save.

Working with configuration files

To accommodate multiuser systems, Fireworks supports user-specific configuration files. This lets you customize features in Fireworks such as styles, keyboard shortcuts, commands, and so forth, without affecting the configuration of Fireworks for other users.

Fireworks creates a different set of configuration files for each user. Fireworks also installs master configuration files in the Fireworks application folder. Master configuration files contain the default settings for Fireworks and affect all users. Some configuration files, such as Fireworks plug-ins, are located only in the Fireworks application folder. On some systems, only system administrators have access to the master configuration files in the Fireworks application folder.

Note: Windows systems often hide certain files and folders by default. Ensure that your Folder View options are set to display all files and folders. On some systems, you may also need to click Show Files once you get to a folder in order to see its contents. For information about viewing all files and folders, see Windows Help.

About user configuration files

Fireworks user configuration files are stored in the Macromedia/Fireworks MX 2004 folder in your user-specific Application Data folder (Windows) or Application Support folder (Macintosh). The location of this folder varies depending on what operating system you use and on whether your system is a multiuser system or a single-user system. For information on locating this folder, see your operating system documentation.

Note: The names of some system folders may vary on localized and customized systems.

About master configuration files that affect all users

Master configuration files that affect all users are located in the Fireworks application folder, which is the location on your hard disk where you installed Fireworks.

Note: Many configuration files are stored in subfolders within the Fireworks application folder. Their location varies depending on your operating system. Also, Macintosh users should be familiar with the package concept from Apple. For more information see [“Viewing package contents \(Macintosh only\)” on page 287](#).

Whether you're on a multiuser or a single-user system, Fireworks changes your user-specific configuration files and not the master configuration files in the Fireworks application folder when you save most settings. This is because many users don't have access to all files if they are on multiuser systems.

Users with administrator-level access can customize features for all users by modifying the master configuration files in the Fireworks application folder.

To save a master configuration setting for all users:

- Save or drag a copy of the file into the appropriate location in the Fireworks application folder.

Location of the Fireworks preferences file

Fireworks preferences are stored in a file named Fireworks MX 2004 Preferences.txt (Windows) or Fireworks MX 2004 Preferences (Macintosh). The location of this file varies depending on your operating system.

- In Windows, preferences are in your user-specific Fireworks configuration folder. For more information about locating this folder, see [“About user configuration files” on page 286](#).
- On the Macintosh, preferences are in the Library/Preferences folder in your user folder. For information about locating your Macintosh user folder, see Apple Help.

Note: On the Macintosh, most Fireworks user-specific configuration files are stored in a different folder, your user-specific Application Support folder. The Fireworks MX 2004 Preferences file is an exception.

About reinstalling Fireworks

When you uninstall or reinstall Fireworks, your user-specific configuration files are left untouched on most systems. If you want to reinstall Fireworks using the default settings, you must manually delete your user-specific configuration files before reinstalling the application.

Note: Your user-specific configuration files are located in your user-specific Application Data (Windows) or Application Support (Macintosh) folder. For information on locating this folder, see [“About user configuration files” on page 286](#).

On Windows XP, Windows 2000, and Windows NT 4 systems, you will be asked during the uninstall process if you want to remove preferences and user-specific configuration files. Doing so will remove these files for all users on the system.

Viewing package contents (Macintosh only)

On the Macintosh, Fireworks is installed in a format called the application program package. This is a feature from Apple that allows applications to be installed in a self-contained package.

The application package is where the Fireworks application file is stored, along with all default configuration files that come with Fireworks. Package contents are hidden by default.

After you open the package, you'll notice a number of files and folders.

To show or hide the contents of the Fireworks application program package:

- 1 Navigate to the location on your hard disk where you installed Fireworks.
- 2 Control-click the Fireworks MX 2004 icon and choose Show Package Contents from the context menu.

A new window opens displaying the package contents.

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