WebPainter 3 Getting Started Guide

Create Professional Web Animation and Graphics with Ease!

totally hip™
Software Inc.

©1998 Totally Hip Software Inc. All rights reserved.
Printed in Canada

Totally Hip Software, the Totally Hip logo, WebPainter, and the Web-Painter logo are trademarks of Totally Hip Software Inc.

Adobe PhotoShop is a trademark of Adobe Systems Inc.
Mercutio MDEF from Digital Alchemy, © Ramon M. Felciano 1992-1997, All rights reserved.
All other trademarks and names are the properties of their respective holders.

Information in this document is subject to change and does not represent a commitment on the part of Totally Hip Software Inc.

WebPainter 3 Getting Started Guide

Create Professional Web Animation and Graphics with Ease!

CONTENTS

Introducing WebPainter 1
Animation Gallery 1
New Features in WebPainter 3 1
What You Should Know 2
About This Guide 2
Getting More Information 2
Contacting Totally Hip 2
Creating, Saving, and Opening Files 4
Creating New Files 4
Saving Files 5
Opening Files 5
Importing and Exporting 6
WebPainter Windows and Palettes 7
Document Window 7
Cel Layers Window 8
Tool Palette 9
Brush/Line/Pattern Palette 12
Coords/Gradient/Spray Palette 12
Palette or Color Selector Window 13
Inspector Window 14

Tutorial: Adding Pizazz to a Logo 15
Tutorial: Stopping Traffic 18
Understanding Web File Formats 21
Web Graphics Formats 22
Getting Your Animation Seen 26
Browser-safe colors 26
Animation Size 26
Glossary 28
Index 33

1 INTRODUCING WEBPAINTER

Welcome to WebPainter™, all you need to produce snazzy animation and flashy graphics for the Web. WebPainter is easy and fun to use, but it's also a powerful tool. With WebPainter's collection of animation that you can use free on your page, and its automating features, you'll be adding animation to your Web page in no time!

WebPainter is the perfect animation and graphics tool for everyone from novices to professional animators.

Animation Gallery

The Animation Gallery contains over 1000 animations included free with WebPainter 3. You can use them royalty-free on your Web sites. This animation, created by a team of professional animators, is available for almost any occasion, from business-related animations to something festive for your electronic party invitations.

New Features in WebPainter 3

WebPainter 3 offers some exciting new features to make creating animation even easier.

Layers: Use layers to organize and work with complex graphics. You can have different elements of the same graphic on different layers so you can edit them individually. Layers are automatically compressed into one layer when you export your animation. For more information see the WebPainter manual or online help.

Transitioning, Special Effects, and Filters: WebPainter can automatically create animation for you when you apply transition effects to existing graphics. For example, WebPainter can automatically make an existing graphic gradually fade in and out, or wipe across the screen. WebPainter can also automatically generate new animation cels using effects like clouds and fire. You can also use filters to distort and change your graphics. For more information, see the *WebPainter 3 Tutorials, Tips, and Tricks Guide* or online help.

Vector Graphics: Vectors are also called "object-oriented graphics" because unlike bitmaps, which are made up of individual pixels, vectors are treated as objects. You manipulate a vector as a single object. WebPainter now has a bitmap painting palette and a vector graphics palette. For more information see "WebPainter Windows and Palettes" on page 7.

What You Should Know

Before using WebPainter you should be familiar with your computer. You should know how to use a mouse, open, save, and close files. You should also know how to click and drag objects.

About This Guide

This guide provides a general overview for new users. It introduces WebPainter's main windows, menus, and tools. Get started by following the beginner tutorials on page 15 and page 18.

Getting More Information

You'll find detailed instructions on all of WebPainter's features in the online help. The online help is available when you're using WebPainter.

To access the online help

When WebPainter is running, press F1.

The *WebPainter 3 Tutorials, Tips, and Tricks Guide* contains more advanced tutorials covering most of WebPainters major features. It's in PDF format. You can either view it on screen or print it using Adobe Acrobat Viewer. It's on your computer in the following location WEBPAINTER 3/MANUAL/WP3MANUAL.PDF.

Contacting Totally Hip

You can find late-breaking Technical Support notes and answers to frequently asked questions on our site: **www.totallyhip.com/Support/**

You can also call Technical Support between 9:30 am time and 4:30 pm PST at **(604) 685-0984**. Or you can e-mail us anytime at **techsupport@totallyhip.com**.

If you're interested in purchasing another copy of WebPainter or want to find out about our other products, call, fax, or e-mail us.

voice	(888) 884-3447
fax	(510) 548-7117
international voice	(604) 685-6525
e-mail	sales@totallyhip.com

For general questions about WebPainter, Totally Hip, or any other products, e-mail us at **info@totallyhip.com** or check out our web site at **www.totallyhip.com**.

2 CREATING, SAVING, AND OPENING FILES

WebPainter creates, saves, and opens files in WebPainter format (.WPM). However you can import and export files in many standard graphics file formats.

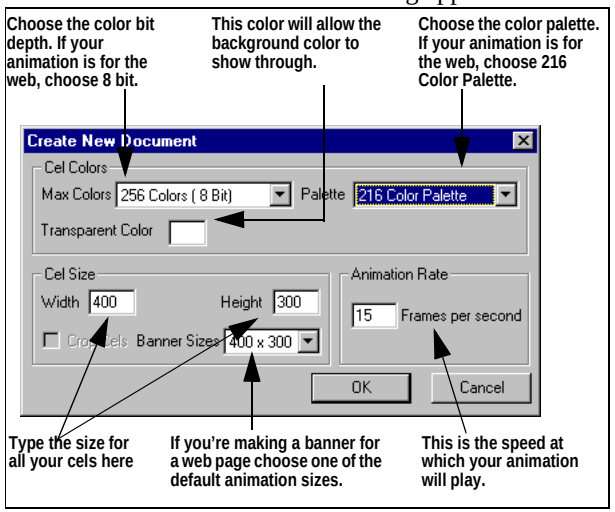
Creating New Files

To create new animation files, simply follow these easy steps.

To create an empty new file

1. On the File menu, click New.

   The Create New Document dialog appears.



2. Choose your settings.

   Note: You can change these settings later using the Document Settings dialog.

3. Click OK.

   An empty WebPainter canvas appears.

Saving Files

You can only save files in WebPainter format. If you want to save files in another format, you must export them.

To save a file

1. On the File menu, click Save.
   The Save dialog appears.
2. Type a name for the file.
3. Click Save.
   The file is saved with the file extension WPM, which stands for WebPainter Movie.

Opening Files

Like saving, you can only open WebPainter files. If you want to open files in other formats, you must import them.

To open a file

1. On the File menu, click Open.
2. Locate the file you want to open.
   You can only see files that are in WebPainter format.
3. Click Open.
   The file is opened in WebPainter.

Importing and Exporting

WebPainter only opens and saves WebPainter format (.WPM) documents. However, it can import and export most graphic file formats. If you want to work with an existing format, you need to import it. If you want to save your file as an animation or a different type of graphic you need to export it. To use your file or animation on the Web you must export it.

WebPainter can import and export the following file formats:

QuickTime Image and Movie	BMP
GIF and animated GIF	PICS
PNG	PICT
Adobe® Photoshop™	AVI
EPS (Encapsulated PostScript)	JPG
RAS (Sun Raster Format)	TIFF
PCX	TARGA

For descriptions of these file types, see the “Glossary” on page 28. To learn how to import and export files see

the WebPainter online help or *Tutorials, Tips, and Tricks Guide*.

For information about the type of files used on the Web for animation and still graphics, see “Understanding Web File Formats” on page 21.

3 WebPainter Windows and Palettes

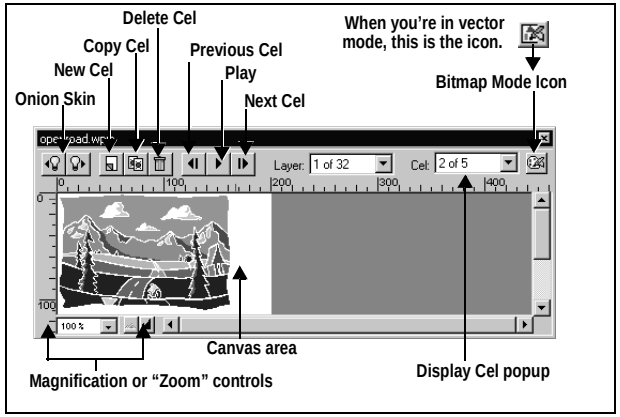
This chapter gives an overview of the main windows and palettes in WebPainter. New users should use this chapter to familiarize themselves with WebPainter. Experienced users might want to browse this section to see the changes in WebPainter 3.

The Document window is always visible. To display any other palettes or windows, click their names on the Window menu.

Document Window

This is the main window of your animation. It shows the canvas for one cel at a time. You'll create all your graphics in this window.

Vector and Bitmap Painting The Vector or Bitmap icon shows you whether you're in bitmap or vector mode. You can also click it to change modes. In Bitmap mode, the graphics you create are made of individual pixels that you can erase. In Vector mode the graphics are individual objects that you can manipulate as a whole. In Bitmap mode you can create painting effects with the Paintbrush or Airbrush. In Vector mode you can draw and manipulate standard shapes.



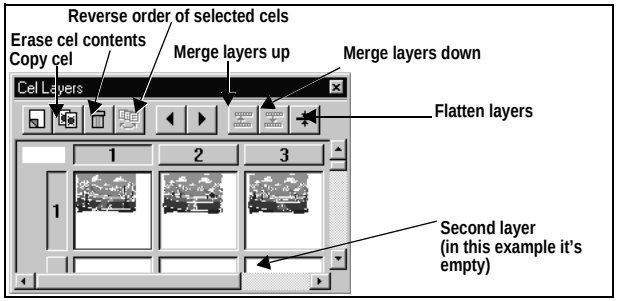
Onion Skinning Onion skinning displays a faded image of the previous or next cel on the canvas area of the Document window. Use it to help you position graphics and action in relation to the graphics and action in other cels.

Working With Cels In the Document window you can play your animation, or step through the frames one cel at a time. You can copy the contents of an entitre cel, create new blank cels, and delete cels.

Cel Layers Window

In this window you can view all the cels in your animation in the order in which they play. You can also see WebPainter's 32 layers. Layers enable you to work with detailed areas of a cel without worrying about affecting other areas. If you don't need layers anymore, you can merge them. However, layers are automatically merged when you export an animation.

You can also use the Cel Layers window to rearrange the cels in your animation by dragging and dropping them. You can copy, erase, and change the order of selected cels.

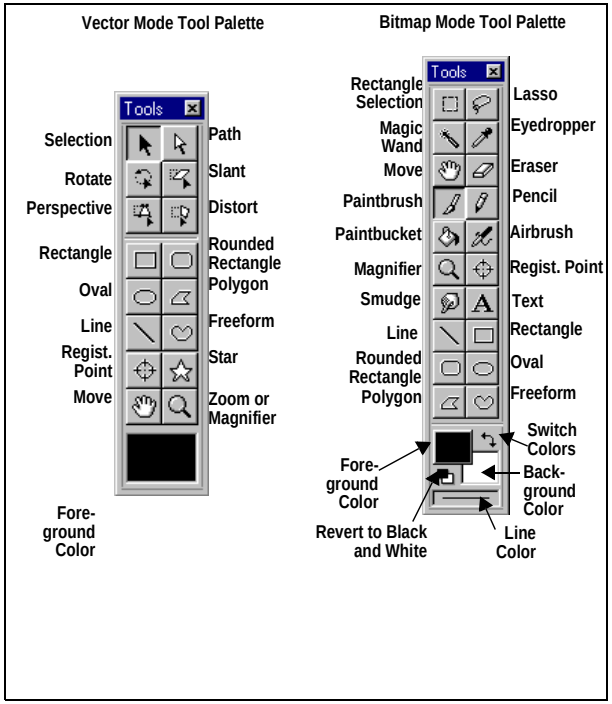


Tool Palette

The Tool palette contains the tools you'll use to create bitmap or vector graphics. The Tool palette looks different depending on whether you're in bitmap or vector mode. You choose tools by clicking them on the palette. The cursor changes to display the tool you're using.

Paths and Vectors A path is a vector that is made up of points that you can manipulate individually. When you draw a shape in Vector mode using the Freeform or Polygon tools, it is automatically a path. However, you can convert any other vector to a path by selecting it and choosing "Convert to Path" on the Transform menu.

You can rotate, scale, apply perspective, slant, distort, and flip paths and bitmaps. If you convert a regular vector to a path, you can then apply these manipulations to it.



Shape Tools

Tool	How to use
All Shapes and Line tools	Click the canvas area and drag to draw a shape. Drawing shapes works the same way in bitmap or vector mode.

Selection Tools

Tools	How to use
Vector Selection	Use this tool to select vectors by clicking them.
Rectangle Selection Tool	Drag a rectangular selection area with this tool.
Path Tool	Use this tool to select paths by clicking them.
Lasso Tool	Drag an irregular selection area with this tool. This tool is useful for selecting irregularly shaped areas on a white background.
Magic Wand Tool	The Magic Wand selects all areas of the same color that are touching each other. It's helpful for selecting large areas that may have other colors on top of them. You might want to use it to change all areas of one color to another color.

Painting Tools

Tool	How to use
Paintbrush	Drag the brush to create brush strokes. The brush paints in the Foreground color. You can also change the brush stroke. See "Brush/Line/ Pattern Palette" on page 12 for more information.
Pencil	Drag the pencil to create bit-mapped lines. The pencil draws one pixel-width lines.
Paintbucket	The paintbucket "dumps" the Foreground color into the currently selected area.
Airbrush	Drag the airbrush to create a spray effect. You can change the airbrush spray. See "Coords/ Gradient/Spray Palette" on page 12 for more information.
Smudge	Use the Smudge tool to blend to areas of color that are beside each other. Drag the tool between the colors to smudge.
Eyedropper	Use the Eyedropper tool to suck up an area of color on your canvas. The color becomes the Foreground color so you can use it for other shapes.

Tool	How to use
Eraser	Drag the eraser to remove areas of the graphic. Remember, this only works in bitmap mode. The Eraser paints using the Background color.

Color Tools

Tool	How to use
Foreground Color	This is the color for all vectors you draw, and if you have the Draw Filled setting turned on, all bitmap shapes. To change the Foreground color, click and hold the color to display the color palette. Drag the mouse to another color and release.
Background Color	This is another color that you frequently use. To change the Background color, click and hold the color to display the color palette. Drag the mouse to another color and release.
Line Color	This is the color for all lines you draw with the Line tool (vector and bitmap) and the border color for all shapes you draw with the Bitmap Shapes tools. To change the line color, click and hold the color to display the color palette. Drag the mouse to another color and release.
Switch Colors	Click the Switch Colors icon to switch the Foreground and Background color.

Manipulation Tools

Tool	How to use
Move	Use this tool to drag the selected bitmap or vector.
Rotate	Use this tool to drag a vector path to rotate it. This applies to paths only. For more information see “Painting Tools” on page 10.
Distort	Use this tool to drag the vector path into a new shape. This applies to paths only. For more information see “Painting Tools” on page 10.

Tool	How to use
Perspective	Use this tool to drag the vector path so that it looks like it has perspective. This applies to paths only. For more information see “Painting Tools” on page 10.
Slant	Use this tool to change the angle of the vector path. This applies to paths only. For more information see “Painting Tools” on page 10.

Other Tools

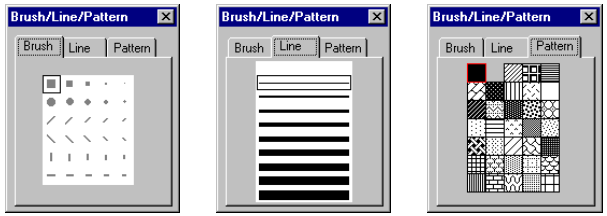
Tool	How to use
Magnification or Zoom Tool	Click the canvas with this tool to magnify the view. To zoom out, hold down the Option key and click the canvas.
Registration Point	The Registration point is a fixed point that’s displayed in all your cels. Use it to align graphics between cels. The Registration point is for your reference only and doesn’t print.

Brush/Line/Pattern Palette

You use this palette to change the following settings:

- the brush stroke for the Paintbrush tool
- the line size for the Line tool
- the fill pattern for all filled shapes

To change any of the settings, click a new setting on the palette.

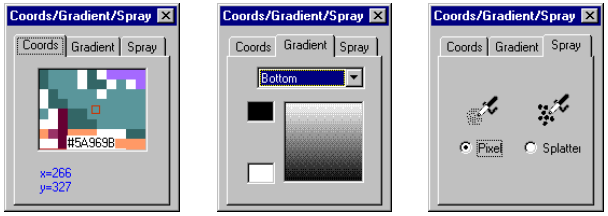


Coords/Gradient/Spray Palette

Use this palette to:

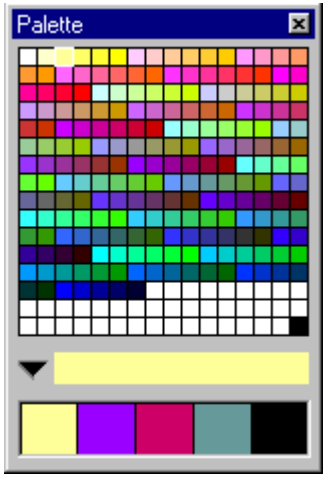
- locate specific coordinates on the canvas in the Document window. You may want to use coordinates if you are creating a very exact graphic or animation.

- set a gradient color that is used when you draw filled shapes or when you use the Paintbucket tool to fill existing areas. This gradient only applies to bitmap areas. You can apply gradient to vectors in the Inspector window. For more information see “Inspector Window” on page 14.
- change the spray pattern for the Airbrush tool. You can change from pixel to splatter, and increase the rate of spray.



Palette or Color Selector Window

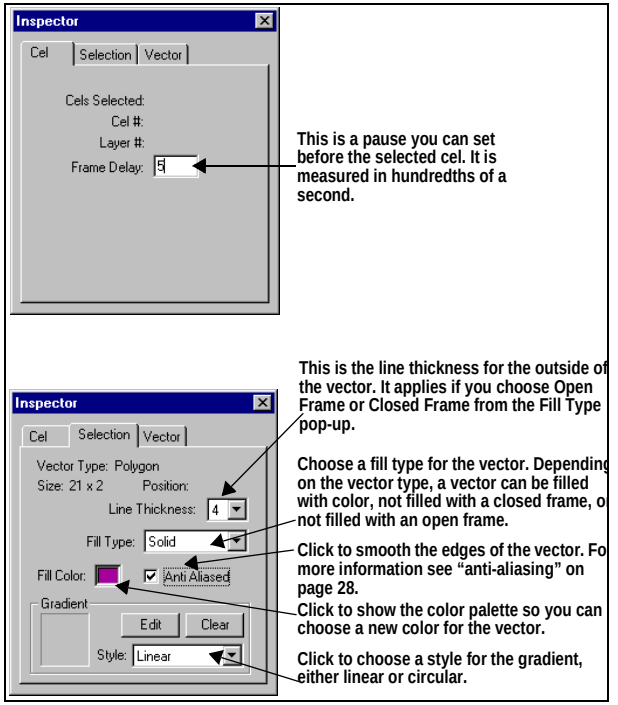
This palette displays all the colors in the palette you’re using in your document. (You choose the palette when you create a new document. See the online help for more information.) You can change the colors in your document, but if you’re designing animation for the Web, you should use the standard 216 color Web-safe palette.



Inspector Window

This window displays detailed information about your animation. The information displayed in it varies depending on what's selected in the Document window.

The window has three tabs that give you information about the current cel, selection, and vector. You can use the Inspector Window to quickly change settings for any of these items. The Selection tab only applies when vectors or paths are selected. The Vector tab only contains options you can change when a vector drawn with the Star tool is selected.



4 TUTORIAL: ADDING PIZAZZ TO A LOGO

It's fast and easy to apply animation effects to company or personal logos using WebPainter. This tutorial shows you how to make the Totally Hip logo gradually appear from a blank screen. Once you've learned the basics, you can use these techniques to apply effects to your own logo.

Before you complete this tutorial, you should be familiar with "WebPainter Windows and Palettes" on page 7.

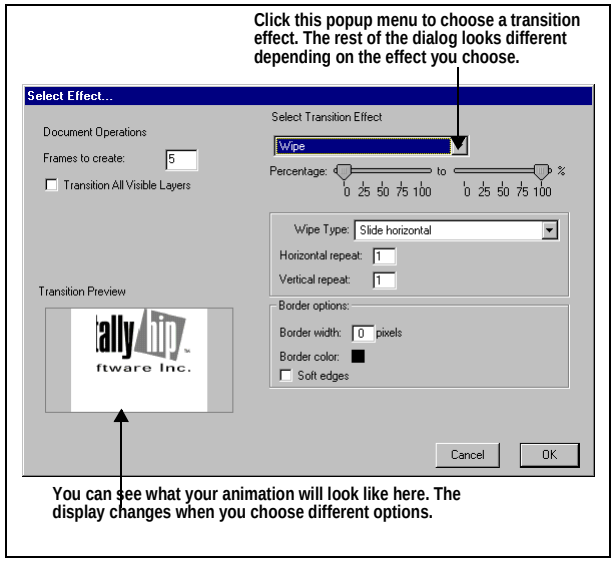
This tutorial shows you how to do a "wipe." A wipe is a standard video effect where a graphic gradually appears or disappears. If you have more than one graphic, you can create a wipe where one graphic is gradually replaced by another one.

This tutorial takes 10 minutes to complete.

To make our logo gradually appear, complete the following steps

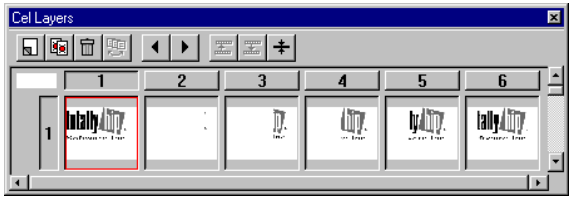
1. Start WebPainter.
2. If the Create New Document dialog appears, click Cancel. If the Open File dialog appears, go to step 4. You're going to open an existing file, not create a new one.
3. On the File menu, click Open.
   A standard file dialog opens.
4. On your computer, locate the following folder WEBPAINTER 3/MANUAL/TUTORIALS/.
5. Open the LOGO.WPM file.

6. On the Cels menu, click Add Transition Cels.
   The Select Effect dialog appears.



7. In the Select Transition section, click the popup menu.
8. On the popup menu, click Wipe.
   You'll notice that in the Transition section, the logo automatically appears to be gradually erased from left to right. This default setting is "Slide Horizontal."
9. Click the Wipe Type popup menu, and experiment with different wipe options.
   Whatever wipe you choose, you'll notice that the Totally Hip logo is being erased. We want to make it appear instead. We can do this using the Percentage Sliders.
10. Drag the first slider to 100.
    This means that the wipe starts with 100 percent of the graphic showing.
11. Drag the second slider to 0.
    This means that the wipe finishes with 0 percent of the graphic showing. Notice that now the Totally Hip logo gradually appears.
12. In the Frames To Create box, type 5.
    WebPainter will create 5 new cels for the wipe transition. The greater the number of cels you specify, the smoother the animation.

13. Click OK.
    WebPainter automatically creates the wipe animation. If you want to play it, click the Play button in the Document window.



The Cel Layers Window for the finished animation

It's that simple! If you have your own logo in a format WebPainter can open, you can try adding effects to it. For more information about WebPainter and file formats see "Creating, Saving, and Opening Files" on page 4.

5 TUTORIAL: STOPPING TRAFFIC

In “Tutorial: Adding Pizazz to a Logo” on page 15 you learned how to manipulate an existing graphic. In this tutorial, you’ll learn how to draw a new graphic, and apply some basic animation techniques to it. In this tutorial, you’ll make a graphic of traffic lights, and make the lights change from green to yellow to red.

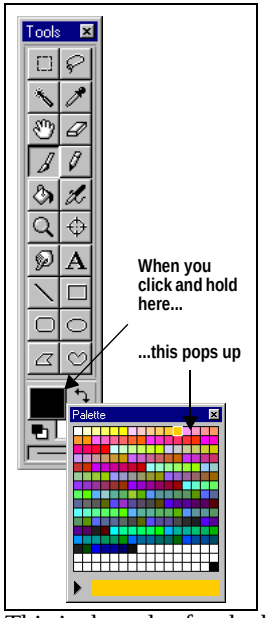
You’ll see how easy it is to make a simple animation from scratch in WebPainter. You don’t need to be a professional animator (or even a good artist).

Before you complete this tutorial, you should be familiar with “WebPainter Windows and Palettes” on page 7.

This tutorial takes 10 minutes to complete.

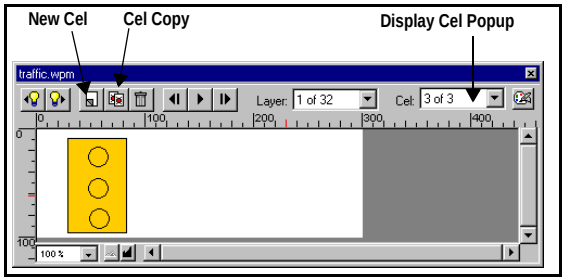
To make an animated traffic light, complete the following steps:

1. Start WebPainter.
   The Create New Document dialog opens.
   Note: You may have WebPainter set to start with the Open File dialog. If this is the case, click Cancel and then click New on the File menu.
2. Click OK.
   For this exercise we’ll use the default file format options.
3. On the Paint menu, click Draw Filled.
   Now all your shapes will be drawn filled with the Foreground color.
4. Click and hold the black square at the bottom of the tool palette. It’s the Foreground Color square.
5. On the Color palette, drag the cursor to a shade of orange.



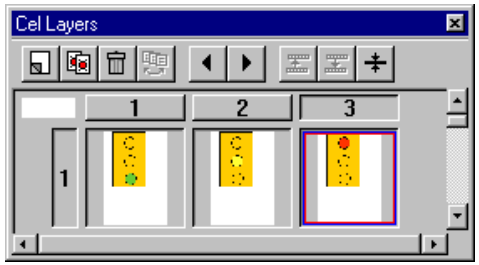
This is the color for the body of the traffic light.

6. Click the Rectangle tool.
7. On the Canvas area, drag to draw an orange rectangle.
8. Click the Oval tool.
   You'll draw the lights with the oval tool. **Hint:** If you want to align your circles, on the Show menu, click Grid. This displays a grid which makes it easier to line things up.
9. Hold down the Shift key and drag to draw three circles.



Click the Cel Copy button twice.
Now you have three cels each with an orange rectangle in them.

10. On the Display Cel popup menu, click 1 to return to the first cel.
11. Click the Foreground Color, and drag across the palette to choose a shade of green.
12. Click the Paintbucket tool.
13. Click the Bottom circle.
14. On the Display Cel popup menu, click 2 to go to the second cel.
15. Repeat steps 11. to 13. but this time, change the center circle color to yellow.
16. On the Display Cel popup menu, click 3 to go to the third cel.
17. Repeat steps 11. to 13. but this time, change the top circle color to red.
    That's it.
18. On the Document window, click the Play button to watch your light changing.



The Cel Layers Window for the finished animation

Congratulations, you've just created your first animation. It might not be fancy, but you made the whole thing yourself.

If you're interested in tackling some more advanced tutorials see the *WebPainter 3 Tutorials, Tips, and Tricks Guide*.

6 UNDERSTANDING WEB FILE FORMATS

This chapter provides a basic introduction to the file formats commonly used on the Web, the best format to use in different circumstances, as well as considerations and options for using each format. If you're new to designing animation for the Web, you should also read "Getting Your Animation Seen" on page 26. It describes how to avoid some common pitfalls when designing animation for the Web.

WebPainter works with its own file format type (WPM) but it can import and export many other formats. To display a WebPainter animation or still graphic on the Web, you need to export it to another format.

Use the following table for quick reference for the type of files WebPainter imports and exports, and whether you can use them for Web animation.

Files are cross-platform unless otherwise stated.

File Type	Use	Use on Web	Supports Animation
Animated GIF	Cel animation, single file with multiple animation frames	Yes	Yes
GIF	single graphic file	Yes	No
BMP	single Windows graphic file	No	No
AVI	Windows video file	Yes	No
PNG	single graphic file	Yes	No
JPEG	single image file (usually for photographs)	Yes	No
Adobe Photoshop*	transfer images between WebPainter and Adobe Photoshop	No	No
PIC	single Macintosh graphic file	No	No
PICT	single Macintosh graphic file	No	No
QuickTime Image	single image	Yes	No
QuickTime Movie	cel animation, single file with multiple animation frames	Yes	Yes
TIFF	single graphic file	No	No

File Type	Use	Use on Web	Supports Animation
PCX	single graphic file	No	No
RAS	single graphic file for SUn computers	No	No
TARGA	single graphic file	No	No

*3.0 or earlier format only

Web Graphics Formats

Most animation on the Web uses the animated GIF format because it supports many animation features and can be viewed by all browsers. Still graphics are usually JPEG or GIF file. JPEG is the best format for photographs although the file size is a bit bigger than GIF, and GIF is used for just about everything else.

The following section describes the settings available for the most common Web file formats. For descriptions of the other formats see the online help.

Animated GIF Animated GIF is the most common and popular form of animation on the Web. This is because it doesn't require any extra plug-ins for users to view it.

Also, if a user has an older browser that doesn't support animation he or she can still view the first or last frame of the file. If GIF animation is done correctly, the file size is quite small which means it downloads quickly; this is important to keep the viewer's attention.

Both Animated GIF files and GIF files can be added to Web pages using standard HTML in most HTML editors.

When you export Animated GIF files from WebPainter , you can set the following options.

Option	Meaning
Frame Delay	A pause in hundredths of a second before a specific cel. You set Frame Delay in the Inspector window. For more information see, "Inspector Window" on page 14.
Transparent Background	You can set the background of a GIF animation to transparent. This means that the background of the Web page will show through instead of an ugly white box around your animation.

Option	Meaning
Interlaced	When a file is interlaced the entire graphic is displayed at once and gradually becomes clearer as more data is downloaded. This enables users to get an idea of what the graphic will be and may hold their attention longer. Interlacing is better for still images than animated images.
User Input Flag	This option means that the next frame of the animation won't play until the user does something like click the mouse.
Disposal	Disposal defines what a browser is supposed to do with a frame after it's been displayed. Different browsers treat this option in different ways so it can be a difficult setting to work with. However, if you leave this option set to Unspecified, the animation will play as you expected: one frame will be replaced with the next.
Optimize Size	If you check this, WebPainter will try 13 different 13 different compression methods on the difference between each frame and select the best for that particular frame. This setting helps to keep your file size small.
Frame Difference	Frame Difference exports just the difference between cels or frames in your animation instead of all the data for each frame. This setting helps to keep your file size small.
Loop	Looping determines the number of times your animation will play. If you set it to 0 it will play forever. If you set it to 1 it will play once and so on.

GIF File GIF files are cross-platform and compressed which makes them ideal for Web graphics. They are best for images with large areas of solid color for example, logos, text, and simple illustrations. Although you can use them for photographs, JPEG provides better image quality and is more commonly used.

The options for exporting GIF files are transparent background and interlacing. For descriptions of these options see "Animated GIF" on page 22.

QuickTime Movie QuickTime is a video file format created by Apple. It's available for Windows and Macintosh. The QuickTime format supports sound, however,

WebPainter does not. Users need a QuickTime plug-in to view QuickTime movies. However, this plug-in is included with many Web browsers, widely available on the Web, and it comes with WebPainter.

Option	Meaning
Compression	You can choose one of a number of standard compression modes. Some compression formats will discard some of your original data and some will retain all of it. A common compression format for a QuickTime movie that will be played on the Web is Sorenson Video. However, for most animation the best compression format is Graphics.
Quality	You can determine the image quality for the animation. The higher the quality, the larger the file size.
Frames Per Second	You can control the speed at which the animation will play by setting the frames per second. The higher the number, the faster the animation will play.
Key Frame	A key frame is an individual cel for which all the data is downloaded, not just the difference between frames. A larger number of key frames may give you more accuracy, but it will also slow down the animation.
Data Rate	Data rate is the amount of information that must be transferred to a user's display for the animation to play smoothly. Although you can set the data rate, the speed the animation is actually played at is determined by the user's Internet connection speed and system.

QuickTime Image Format This is a static file format. It does not support animation. You might want to export in this format if you wanted to use a single cel or frame from your animation in another file. The options for exporting GIF files are compression and quality. See "QuickTime Movie" on page 23.

JPEG This Web graphics file format is commonly used for photographs. It doesn't use as much compression as GIF so files saved as JPEG are bigger. It's also a "lossy"

format which means that some data is lost when you save the file. JPEG has only one export option: image quality. The higher the image quality, the larger the file.

The rest of the file formats that you can export from WebPainter don't have any export settings specific to them. For more information about exporting and file formats, see the online help.

7 Getting Your Animation Seen

If you're creating animation for the Web, you want people to see it. If you want people to see it, you'd better make sure your animation uses colors that look good on most systems and that it downloads fairly quickly. You can make sure that people see the animation with the colors you intended by using browser-safe colors. You can make sure that they see it by keeping your animation size small so that it downloads quickly.

Browser-safe colors

Different computer operating systems have different ways of displaying color on the screen. When you're designing graphics for the Web, you don't know what combination of browser, operating system, and monitor someone will use to view your animation. Therefore, you really can't tell what it's going to look like, unless you use "browser-safe colors." Browser-safe colors are a collection of 216 colors that are guaranteed to display properly on systems Macintosh and Windows systems using all browsers.

If you use colors outside of these colors, the system will either replace the color you used with another color, or it will "dither" the color. Dithering creates colors by combining other colors. Depending on the success, you can sometimes actually see where the colors are blended.

How do I use a browser-safe color palette? WebPainter comes with a browser-safe color palette called 216 Color Palette. You can choose it when you create a new document or change it later using the Doc Info command on the File menu. It's recommended that you do this if you're designing animation for the Web.

Animation Size

Plenty of people still use 8-bit monitors and slow Internet connections. If you keep this in mind when designing your animations, the largest number of people will be able to enjoy them as you intended.

Your animation size is affected by the following factors that can be specified in WebPainter. For more information see the WebPainter online help.

Number of cels: Keep it small. People will be more impressed by a small, quick-loading animation than one that demonstrates millions of animation techniques but takes half an hour to download.

Number of colors in the palette: Decrease before exporting. Before you export your graphic you can decrease the size of the palette to only the colors used in your animation. This will decrease the size of your file.

Size of cels: Keep them small. Crop any extra white space around your animation. Even if the extra white space is set to invisible, it will increase the size of your file.

Complexity of the graphic: Keep it simple. There's no point in designing an extremely detailed graphic if you don't know the resolution of the monitor it will be viewed on. Keep your designs clean and simple.

Bit Depth: Use the most common one. If you design graphics using 16.7 million colors, they won't display properly on 8-bit monitors. Also, the greater the bit-depth, the larger your file size. When you're designing graphics for the Web, you need to consider the size of the file and the type of monitors you want to be able to view it on.

If you stick to this advice, your file size will be small and your animation will download quickly.

For examples of simple yet effective animation files that download quickly, check out the Animation Gallery that came on the WebPainter CD.

8 GLOSSARY

anti-aliasing Adding pixels to the edge of an image to smooth the jagged edges of bitmapped images. For example, if you have a red image on a yellow background, adding orange pixels to the edges can smooth the harsh appearance. Anti-aliasing is not recommended for animated images because it makes the files larger. The blended pixels also make it more difficult to use a transparent background.

AVI Audio Visual Interleaf. A standard digital video format created by Microsoft for the Windows platform only.

banner A section of a Web page that often displays graphics or advertising. If you'll be using your animation as a Web page banner, you can choose one of the standard banner sizes when you create the file.

bit depth The number of colors a bitmap can contain. Bit depth is also called pixel depth or bit resolution. Bit depth refers to the number of bits used to store information for each pixel on a computer screen. The greater the bit depth, the greater the number of colors that can be displayed.

A 1-bit monitor can only display black or white. Each pixel can display 1 bit. It can either be "on" or "off."

An 8-bit monitor can display 256 colors. That is, each pixel can display a different combination of 8 bits.

A 24-bit monitor can display 16.7 million colors. That is, each pixel can display a different combination of 24 bits.

BMP Bit-mapped graphic file. A BMP image is formed by a pattern of pixels, and the resolution is limited to the maximum screen or printer resolution. Bit-mapped graphics are usually large, and it is difficult to resize images without creating jagged edges.

cel One frame of an animation.

EPS Encapsulated PostScript File. A high-quality graphics format developed for printing by Adobe Systems Inc.

DIB Device Independent Bitmap. A bitmap containing a single image. When you copy and paste a bitmapped image in WebPainter, the Edit menu displays “Paste DIB.”

dithering The combining of pixels of several colors to produce another color. The new color often appears spotted instead of smooth and flat. Dithering occurs if a color specified on a graphic is not available to the system displaying the graphic.

frame delay The number of milliseconds to pause before playing the next cel.

frames per second The speed of the animation determined by the number of frames played each second.

GIF Graphics Interface Format. A compressed file format developed by CompuServe for fast transfer of graphics over the Internet. GIF files are cross-platform. A GIF can be a single image or an animation.

This format supports important features for Web animation, for example, delay settings in hundredths of seconds, transparent color, multiple images in one file, and interlacing. WebPainter retains these settings when you import an animated GIF file.

gradient A gradual change from one color to another.

interlacing An interlaced image is displayed all at once at a low resolution on a Web page. As more information about the image is downloaded, the image becomes clearer. This gives viewers an idea of what the image will be and may hold their attention longer. GIF and PNG files can be interlaced. JPEG files cannot.

JPEG or JPG JPEG is commonly used to refer to a file type developed by the Joint Photographic Experts Group. JPEG is the best format for photographs or other images that have subtle changes in color or tone. JPEG files are cross-platform and compressed, although as you

compress them, some data is lost. JPEG files do not support animation, transparency, or interlacing.

onion skinning A feature that displays a dimmed version of the previous or next cel in the current cel. Onion skinning helps you position the graphic in each cel in relation to the other cels in your animation.

PCX A graphics format orginally developed for the Windows program "Paintbrush" but now widely used by other applications.

PICT A Macintosh graphics file format. PICT files use vector graphics, but can store bit-mapped information as well.

plug-in A small software application used as an addition to a larger software application. Plug-ins are often used with Internet browsers. For example, the QuickTime plug-in enables you to view QuickTime animation on the Web.

PNG Portable Network Graphics. A file format for compressed, cross-platform graphics. The PNG format was developed as a response for licensing and royalty fees for the GIF format demanded by CompuServe. PNG files can contain up to 16.7 million colors, are interlaced, and can contain up to 256 levels of transparency.

QuickTime A format developed by Apple for animation or video. QuickTime is available for Macintosh or Windows.

RAS sun Raster Format. A bit-mapped graphics format for Sun workstations.

TIFF Tagged Image Format. A bit-mapped graphics format that can display grayscale shading. TIFF format is commonly used for print and can contain resolutions up to 300 dpi.

transparency A particular color that is chosen to be invisible. On a Web page the background color will show through wherever a transparent color is used. Transparency enables you to include irregularly shaped images on Web pages. Without transparency, most images would display with a white background. GIF and PNG images support transparency.

tweening Tweening is the process of creating intermediate cels between two key cels. For example, if you have an animation of someone jumping, the key cels would be the first cel, of the person getting ready to jump, and the last frame of the person landing. The cels in-between are created by tweening. WebPainter uses a type of tweening called transitioning to automatically generate cels based on effects you choose.

vector When referring to graphics, vector graphics are also called object-oriented graphics. A vector graphic is composed of distinct objects, like lines, squares, and circles, that you can manipulate independently. They are called vectors because the software stores them as mathematical formulas.

INDEX

A

active color 18
Adobe Photoshop 21
airbrush spray 12
Animated GIF 21
animation size 26
Animation Gallery 1, 27
anti-aliasing 28

B

banner 28
bit depth 27, 28
bitmap 7
BMP 21, 28
brush stroke 12

C

cel 8, 28
    size 27
    strip 8
Cel Layers window 8
color
    gradient 12
    palette 13, 18
    selector 13
    tools 11
coordinates 12

D

DIB 29
distorting 11
dithering 29
Document window 7
drawing 18

E

effects 1
EPS 29
exporting 6, 14

F

file formats 6, 21
    for the Web 22
files
    importing and exporting 6
    new 4
    opening 5
    saving 5
fill pattern 12
filters 1
Foreground color 18
frame delay 29
frames per second 29

G

GIF 21, 23, 29
    animated 22
gradient 12, 29

I

importing 6, 14

Index 26
Inspector window 14
interlacing 29

J

JPEG or JPG 21, 24, 29

L

layers 1, 8
line size 12

M

magnification 12
Manipulation tools 11
moving 11

O

onion skinning 8, 30
opening 5, 14, 15

P

Painting Tools 10
palette 13
    browser-safe 26
    color 18
    number of colors 27
PCX 30
perspective 11
PIC 21
PICT 21, 30
plug-in 30
PNG 21, 30

Q

QuickTime 23, 30
    Image 21, 24
    Movie 21, 23

R

registration point 12
rotating 11
royalty-free animation 1

S

saving 5
scaling 11
Selection tools 10
settings 14
Shape tools 10
    using 19
slanting 11
spray 12

T

technical support 2
TIFF 30
Tool palette 9
tools
    color 11
    manipulation 11
    painting 10
    selection 10
    shape 10
transition effects 15
transparency 30
tweening 31

V

vector 2, 7, 31
    settings 14
version 3.0 features 1

W

Web color palette 13, 26
WebPainter file format 21
wipe 15, 16

Z

zoom 12