
Significance:

Are you designing a Web site or planning to put up a page on the Web? Are you developing a multimedia presentation? Regardless of which of these activities you may be working on, there is one common element that you will probably be including--graphics. Finding the best graphics program to meet your needs will go a long way in helping you with your project. Two companies that are well-known for their contributions to multimedia and graphic design are Adobe and Macromedia. Knowing about what they have to offer will help you to make your choice of which graphics programs to use.

Discussion:

Raster or Vector, Does it Matter?

In making a choice between graphics software programs, it helps to know which approach will suit you better, designing raster graphics or vector graphics (Louie & Taylor, 1998; Williams & Tollett, 1998).

Raster graphics are commonly known as bitmap images (Louie & Taylor, 1998; Schmitt, 1999; Vaughn, 1998; Williams & Tollett, 1998). The image you see is based on a grid of pixels, similar to a Monet painting. With a bitmapped image, you can edit each pixel, create shadows, smudge features and
many other effects. Bitmap images can be graphics or photos, and GIF, Jpeg or Png files. Williams & Tollett (1998) suggest, "If the application has the word paint or photo in the name…" chances are that it is a bitmap graphics program, like the well-known Photoshop.

Vector graphics are based on mathematical formulas. Graphics created in a vector graphics program are "tight and efficient" (Louie & Taylor, 1996), requiring less memory than it would for a similar graphic in raster form. Vector graphics are also "easily scalable" maintaining the appropriate resolution whether they are shrunk or enlarged (Vaughn, 1998). The tip for identifying vector programs (Williams & Tollett, 1998) is, "If the application has the word draw or illustrate in its name, it is a vector graphics program."

Making a choice about which type of program to use depends on which format you are most comfortable working with (Louie & Taylor, 1996). Vector graphics programs frequently have a higher learning curve than raster graphics programs. With many programs, though, you can create your graphic in one format and convert to the other as needed (Hamlin, 1999; Louie & Taylor, 1998; Williams & Tollett, 1998).

**Making a Choice**

Which graphics program *should* you use? Photoshop (now packaged with Image Ready in Version 5.5) is the workhorse image editing program. With the addition of Image Ready, Photoshop 5.5 is a popular raster-based program. Fireworks 3.0, Macromedia's contender for Web graphics, is a
popular program with Web developers. Flash 4.0 from Macromedia is the powerhouse vector-based program. Freehand and Illustrator are also vector-based programs. But which one should you choose?

There are several things you should consider to help you make a choice between Adobe and Macromedia products and between the various graphics programs that they offer:

- Is the program raster-based/Vector-based?
- Can it convert to vector/raster?
- Can it convert to HTML?
- Can images be sliced?
- Is Java scripting available (as in Rollovers)?
- Can image maps be created?
- Can images be animated?
- What is the learning curve?
- What is its image editing capability?
- What is its image creating capability
- What kind of help/support does the program provide?
- What kind of online resources/support can you find?
- How affordable is the program? (Low=$100-200; Medium=$300-400; High=greater than $400)

The table below helps to put this information into an easy-to-read form to help you make
your comparison
## Comparison of Adobe and Macromedia Graphics Products

<table>
<thead>
<tr>
<th>Feature</th>
<th>Adobe Photoshop</th>
<th>Adobe Image Ready</th>
<th>Adobe Illustrator</th>
<th>Macromedia Fireworks</th>
<th>Macromedia Freehand</th>
<th>Macromedia Flash</th>
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<tbody>
<tr>
<td>Raster-based or Vector-based?</td>
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<td>Convert to HTML?</td>
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<td>Images can be sliced?</td>
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<td>Java Scripting available?</td>
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<td>Can create image maps?</td>
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<td>Image editing capability</td>
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<td>Image creation capability</td>
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Photoshop, cannot be purchased individually) with Dream-Weaver) Flash) come packaged with Freehand)

Time to Decide

Adobe and Macromedia are known for delivering dependable products that work well together with their other products. You may find that instead of just buying one graphics program, you'll want to take advantage of the strongpoints of several different programs. Before you decide, download demonstration versions of the programs and try them out. The best program for you will be the one you are most comfortable with (difficulty level and affordability) and the one with the best support. But whether you go with an Adobe product or a Macromedia product, you know you're getting a good graphics design program.

References:

CNET Builder.com. Available:

Webreview.com. Available:

http://hotwired.lycos.com/webmonkey/98/30/index1a_page7.html?tw=design [2000, 2/18/00].

Related Links For Those Interested in More In-Depth Information:

**General Information:**

http://hotwired.lycos.com/webmonkey/design/graphics/

Webmonkey graphics links

http://graphicssoft.about.com/compute/graphicssoft/

***GRAPHIC REVIEW***

http://hotwired.lycos.com/webmonkey/geektalk/97/30/index3a.html?tw=design

GIF vs JPEG

http://hotwired.lycos.com/webmonkey/98/12/index0a.html?tw=graphics_fonts

Vector Graphics

**Software Comparisons:**

http://nmc.nwu.edu/learning/traintrainer/

Train the Trainer (Illustrator/Fireworks/Photoshop info)

http://hotwired.lycos.com/webmonkey/98/30/index1a_page7.html?tw=design

ImageReady vs Fireworks Shootout

http://photo.net/wtr/illustrator-v-freehand.html

Illustrator vs Freehand
Adobe Products:
http://www.adobe.com/aboutadobe/pressroom/pressreleases/prcategory2.html#photoshop
Adobe Press Releases

Photoshop-
Photoshop Homepage

http://www.geocities.com/~webwinds/classes/photshop.htm
Photoshop Bookmarks

http://www.interlog.com/~mstrange/photoshop~tips/photo~index.html
Photoshop Tips

Photoshop Tutorials From Adobe

http://photo.net/wtr/photoshop.html
Webtools review=Photoshop

Illustrator-
Illustrator Homepage

Macromedia Products:
Flash-
http://www.macromedia.com/software/flash/
Flash Homepage

http://www.macromedia.com/software/flash/reviews/
Flash Reviews

Webmonkey Flash Tutorial
**Fireworks-**
http://macromedia.com/software/fireworks/
Fireworks Homepage

http://nmc.nwu.edu/learning/traintrainer/fireworks.html
Train the Trainer Using Fireworks

Fireworks Article

http://www.webdeveloper.com/design/design_reviews_fireworks.html
Fireworks Review

http://www.macromedia.com/software/fireworks/productinfo/reviews/
Fireworks Reviews on Macromedia's Site

http://coverage.cnet.com/Content/Reviews/JustIn/Items/0,118,368,00.html
1998 Fireworks review

**Freehand-**
http://macromedia.com/software/freehand/
Freehand Homepage

http://www.tema.ru/t/e/e/h/a/n/d/
Freehand Tricks

http://www.macromedia.com/software/freehand/reviews/
Freehand Reviews on Macromedia's site

*This paper is written by Laurie Williams for the course EDC385G Multimedia Authoring at the University of Texas at Austin.*