

# **An Introduction to Multimedia Graphics: Finding the Right Graphics Program to Meet Your Needs**

## **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

|                                      | <b>Adobe Photoshop</b>                             | <b>Adobe Image Ready</b>       | <b>Adobe Illustrator</b>         | <b>Macromedia Fireworks</b>                   | <b>Macromedia Freehand</b>                 | <b>Macromedia Flash</b>       |
|--------------------------------------|--|--------------------------------|----------------------------------|---|--|-------------------------------|
| <b>Rastor-based or Vector-based?</b> | Rastor   | Rastor                         | Vector                           | Rastor  | Vector                                     | Vector                        |
| <b>Convert to vector or rastor?</b>  | No   | No                             | Yes, graphics can be rastorized. | Yes, can be exported as .swf (swf=Shock-wave) | Yes, including for Photoshop & Illustrator | Yes, can be exported as GIF   |
| <b>Convert to HTML?</b>              | No   | Yes                            | No                               | Yes   | No   | No                            |
| <b>Images can be sliced?</b>         | No   | Yes                            | No                               | Yes   |  | No                            |
| <b>Java Scripting available?</b>     | No   | Yes                            | No                               | Yes   | No   | Yes                           |
| <b>Can create image maps?</b>        | No   | Yes                            | No                               | Yes   | No   | Yes                           |
| <b>Capable of animation?</b>         | No, saved in layers to later animate in ImageReady | Yes                            | Yes                              | Yes   | Yes  | Yes                           |
| <b>Learning curve</b>                | High for advanced features                         | Low                            | High                             | Low   | Medium                                     | High                          |
| <b>Image editing capability</b>      | High   | High                           | Medium                           | High  | Medium                                     | Limited                       |
| <b>Image creation capability</b>     | High   | Moderate                       | High                             | High for Web graphics                         | High                                       | High                          |
| <b>Program support</b>               | Easy-to-search program support                     | Easy-to-search program support | Easy-to-search program support   | Support for program is online                 | Easy-to-search program support             | Support for program is online |
| <b>Online support</b>                | Numerous online sites for support                  | Online support sites available | Online support sites available   | Easy-to-search online support                 | Easy-to-search online support              | Easy-to-search online support |
| <b>Affordability</b>                 | High   | (Packaged with                 | Medium                           | Low (also can come packaged                   | High (comes packaged with                  | Medium (also can              |

|  |  |   |  |                        |        |                                       |
|--|--|---|--|------------------------|--------|---------------------------------------|
|  |  | Photoshop,<br>cannot be<br>purchased<br>individually) |  | with Dream-<br>Weaver) | Flash) | come<br>packaged<br>with<br>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:

**Garrigus, S.R.** (1999, 12/22/99). *Macromedia Fireworks 3.0*, [Website].

CNET Builder.com. Available:

<http://www.builder.com/Reviews/Fireworks3/ss01.html> [2000, 3/5/00].

**Hamlin, J.S.** (1999, 7/2/99). *Flash 4 Turns Up the Heat*, [Web site].

Webreview.com. Available:

<http://webreview.com/pub/1999/07/02/feature/index.html>

[2000, 3/11/00].

**Louie & Taylor.** (1998, 7/28/98). *The ImageReady vs. Fireworks*

*Shootout*, [Web Site]. Webmonkey. Available:

[http://hotwired.lycos.com/webmonkey/98/30/index1a\\_page7.html?tw=design](http://hotwired.lycos.com/webmonkey/98/30/index1a_page7.html?tw=design) [2000, 2/18/00].

**Schmitt, B.** (1999, 1/1/99). *Web Graphics Roundup: Branding the Web*

*with ImageReady, ImageStyler and Fireworks*, [Web site].

Webreview.com. Available:

<http://webreview.com/wr/pub/1999/01/01/feature/index.html>

[2000, 3/10/00].

**Vaughn, T.** (1998). *Multimedia: Making It Work*. (4th ed.). New York:

Osborne-McGraw Hill. (299-300).

**Williams, R., & J. Tollett.** (1998). *The Non-Designer's Web Book*. Berkeley:

Peachpit Press. (172-178).

## **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](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](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-**

<http://www.adobe.com/products/photoshop/main.html>

Photoshop Homepage

<http://www.geocities.com/~webwinds/classes/photshop.htm>

Photoshop Bookmarks

<http://www.interlog.com/~mstrange/photoshop~tips/photo~index.html>

Photoshop Tips

<http://www.adobe.com/products/tips/photoshop.html>

Photoshop Tutorials From Adobe

<http://photo.net/wtr/photoshop.html>

Webtools review=Photoshop

## **Illustrator-**

<http://www.adobe.com/products/illustrator/main.html>

Illustrator Homepage

## **Macromedia Products:**

### **Flash-**

<http://www.macromedia.com/software/flash/>

Flash Homepage

<http://www.macromedia.com/software/flash/reviews/>

Flash Reviews

[http://hotwired.lycos.com/webmonkey/multimedia/shockwave\\_flash/tutorials/tutorial6.html](http://hotwired.lycos.com/webmonkey/multimedia/shockwave_flash/tutorials/tutorial6.html)

Webmonkey Flash Tutorial

## **Fireworks-**

<http://macromedia.com/software/fireworks/>

Fireworks Homepage

<http://nmc.nwu.edu/learning/traintrainer/fireworks.html>

Train the Trainer Using Fireworks

[http://www.idg.net/new\\_docids/macromedia/fireworks/internet/monkey/world/developers/previously/available/new\\_docid\\_0-77984.html](http://www.idg.net/new_docids/macromedia/fireworks/internet/monkey/world/developers/previously/available/new_docid_0-77984.html)

Fireworks Article

[http://www.webdeveloper.com/design/design\\_reviews\\_fireworks.html](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/f/r/e/e/h/a/n/d/>

Freehand Tricks

<http://www.macromedia.com/software/freehand/reviews/>

Freehand Reviews on Macromedia's site

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