

Output for the Web

There is the well-known saying 'a picture is worth a thousand words', and it is so true – pictures allow us to communicate visually with clients, friends and family in ways that words alone cannot. The Internet is something most of us use every day and having the means to transmit images has become extremely important to us. The most obvious advantage of sending or displaying images via the Web is its immediacy. Pictures can be sent around the world almost instantly and it is quick and easy to prepare a photo to be distributed in this way. The downside is that, unlike producing a finished print, you have little or no control over the way your images are viewed, plus there are many other pitfalls associated with the limitations of some Internet software. This chapter aims to guide you with suggestions on how best to output your work via the Web.

Sending images over the Internet

Let's first look at some of the ways you can distribute images over the Web. With the increasing popularity of Broadband, cable and ADSL connections, you can effectively use any fast connection to the Internet to transmit or receive large files.

Email attachments

The easiest way to send image files is to send them as attachments via email. Email programs may differ, but most should let you simply drag a file from a folder on your computer into the body text area of an email. Click Send and the attached document will be distributed along with the text message in the email. This is something that's relatively easy to do, but not completely flawless. For example, there is no reliable way of knowing if the recipient's email program can decode an attachment that has been sent via your email program. If you communicate using email this way, it is also a good idea to keep the attachments small. As a rule, I tend to keep all attachments under 2 MB and before sending anything bigger I generally check with the recipient first to see if they mind receiving attachments that are bigger than this. The Internet suffers quite enough already with bandwidth being consumed by unwanted junk emails. So don't add to the problem by sending large, unsolicited attachments. If it is OK to send a big file, I suggest you ask the recipient if there is a limit in place for the size of attachments they can receive in a single email, because if you exceed this your email will only bounce back.

As long as you are aware of the restrictions of using email and the possible limitations of the recipient's server, email can be an effective way to transfer smallish documents. Lots of people use email this way to share photographs and the advanced email programs are also capable of displaying image file attachments within the body text area. Just remember, this is by no means a foolproof way to send all images. If you place too much faith in email you will soon come unstuck.

Uploading to a server

With email you are sending a message that has the image or images embedded in it. Another alternative is to upload the image file to a server. You can then send an email that contains a clickable link that launches the recipient's web browser and takes them directly to a page from where they can view the file or download it directly. The advantage of this is that the email

Sending multiple images by email

Email programs can accept single or multiple attachments of any format, but not as a folder, unless it has been compressed as an archive first. Aladdin™ Software make the ubiquitous Stuffit™ program which is great for compressing files in his way. It's available for Mac or Windows and handles ZIP compression as well as with its own proprietary format, which uses lossless compression. A Stuffit archive will have a .sit extension, which requires expansion by Stuffit (which is incorporated into the Mac OS), but this can also be saved as a self-extracting archive. In this instance, the archive bears the .sea extension and either WinZip or Stuffit can expand such Mac created archives. If you are using the latest Mac OS X system, you can also use the contextual menu to select the 'compress file' option, to quickly create a ZIP archive on-the-fly. If the pictures in the source folder are JPEGs, then you will probably not notice a big difference in the final file size. But don't worry, this compression does not compromise the quality of the JPEG images any further.

you send is small since it only contains a text link to the server. There is also less risk of such emails being rejected and if the person you are sending the email to needs to share the image link with someone else, they only have to forward the message – they don't have to forward the entire image attachment all over again. First you need to know how to upload to a server. If you connect to the Internet using a subscription service your Internet Service Provider (ISP) will most likely have provided you with a limited amount of server space that you can use to host your own website and upload files to. If you don't have a subscription service or your ISP doesn't provide an adequate amount of server space, you can always rent space from a company that provides a web hosting service on a dedicated server.

FTP software

Once you have your server space sorted out you'll need a dedicated FTP program to upload and manage the files held on the server. Figure 1 shows how I would normally go about making an FTP connection to a server using the Fetch™ program for Macintosh OS X (www.fetchsoftworks.com). If you are working on a PC, try using WS_FTP Pro www.ipswitch.com or Flash FXP™ www.flashfxp.com. All FTP software is more or less the same. To establish a connection you need to provide a link address to connect to the server. Next, you need to enter your user ID and finally your password. If you are familiar with the steps required to configure your email account, you should already have the username and password information to hand. You may need to enter a subdirectory folder as well, but if you have trouble configuring the connection, speak to your ISP. They are the best people to help you in these instances.

To avoid having to re-enter the information each time you connect, it should be possible to save this information (along with the password if you wish) as a shortcut so that logging on to the server is almost as easy as opening a folder on your hard disk. Once the FTP connection window opens this is like any other hierarchically structured folder and the main connection window displays the website documents and subfolders. In Figure 1 you can see how I have created new subfolders with names like 'portraits' and 'Snaps'. I use these specific folders to upload web galleries and images to so that they do not get mixed up with the folder structure of the main website. I can then double-click on a folder such as 'portraits' to reveal the

Macintosh iDisk

Another option available to Macintosh users is iDisk which is part of the now superseded Mac.com package, renamed MobileMe. iDisk is an online server space that you can use for off-site backup storage or as a space to place publicly accessible files and folders. If you want slightly more control with the added benefit of being able to use space that any of your computers can reach, then there is 'DropBox' which offers 2GB of free server space, and your access can be via the menubar (www.dropbox.com).

Yousendit.com

In the last few years, www.yousendit.com™ has become extremely popular as an FTP replacement file delivery service. All you have to do is go to the above website address, create a new user account and use this website to upload files that can be sent to recipients. The service is free for single file transfers up to 100 MB.

subfolder contents and drag the Internet-ready files or folders across into this window. That's all there is to it. The time this takes to accomplish will depend on the size of your files and Internet connection speed. All you have to do is to supply people with a weblink such as the one in the accompanying sidebar, so that they can access these files. When they click on the link you give them, the file should start to download automatically to their computer.

In the case of Bridge and Lightroom, you can now upload web galleries directly to a server, without the need for additional FTP software. When using the Create Gallery panel in the Bridge Output workspace, you'll need to enter the same login information and password as you would to establish an FTP connection, but you'll still probably need FTP software to manage and delete these files and folders when they are no longer required.

Download a sample image file

I have uploaded a photograph to my server which you can access by typing in the following URL address in your web browser: www.martinevening.com/portraits/evening.pdf. This image document was saved as a Photoshop PDF file. You will probably be asked if you want to save the file to the desktop. Click Save and the file will start to download. The reason I saved this image as a Photoshop PDF was to demonstrate the security features that are available when using this file format. To open the PDF file you will need to enter the password 'evening' when prompted.

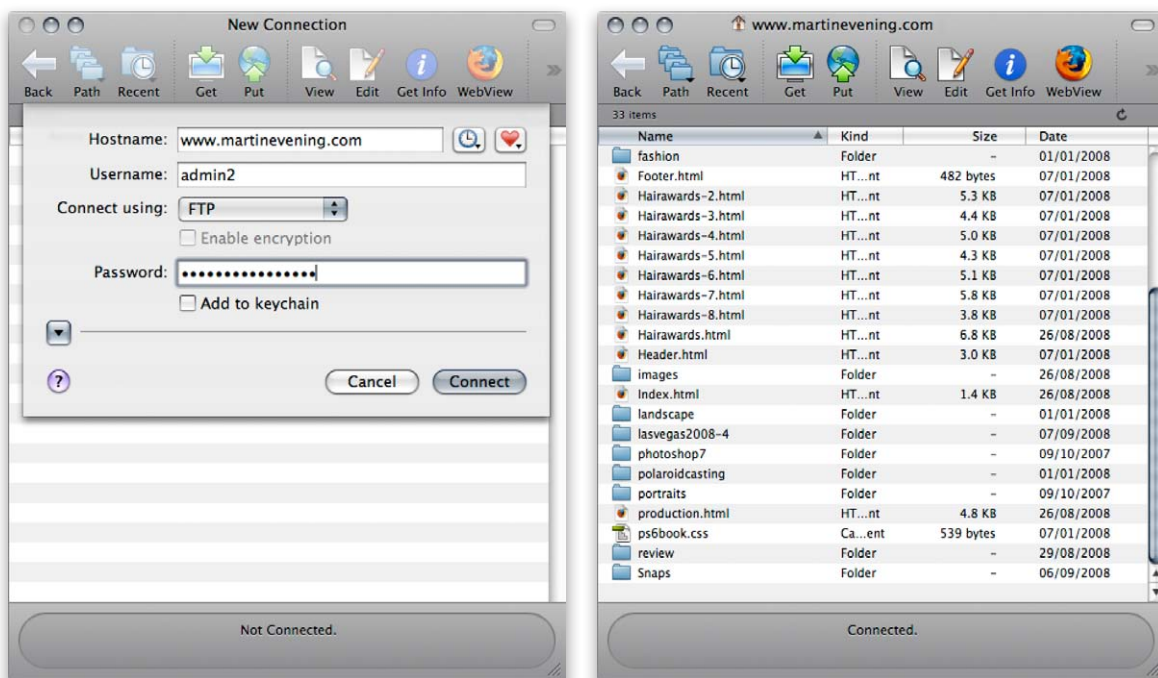


Figure 1 This shows the Fetch™ 5.5.3 FTP software interface with the log-in window on the left and a server directory view on the right.

File formats for the Web

Now that we have covered the fundamentals of how to access a server and administer your allocated server space, let's look at preparing images to be displayed on the Web, some of the different file formats you can use and which are the best ones to choose in any given situation.

JPEG

The JPEG (Joint Photographic Experts Group) format provides the most dramatic way to compress continuous tone image files. The JPEG format uses what is known as a lossy compression method. This means the heavier the compression, the more the image becomes irreversibly degraded. If you open a moderately compressed JPEG file and examine the structure of the image at 200%, you will probably notice that the picture has a discernible pattern of 8×8 pixel squares, and when using the heavier JPEG settings this mosaic pattern is easily visible at a 1:1 pixels view. JPEG compression is usually more effective if the image contains soft tonal gradations as detailed images do not compress quite so efficiently and the JPEG artifacts will be more apparent (see Figure 2). The JPEG format is used a lot in web design work, because a medium to heavy amount of JPEG compression can make most photographs small enough to download quickly over the Internet. Image quality is less of an issue when the main object is simply to reduce the download times. Apart from that do you really want the pirate to steal your treasured image at the highest technical quality?

Photoshop compresses images on a scale of 0–12, where a setting of 12 applies the least amount of compression and yields the highest image quality, while a setting of 0 applies the greatest amount of compression and is therefore the most lossy. When you choose to save as a JPEG and have the Preview option checked in the JPEG Options dialog (Figure 3), you are able to preview the effects of the JPEG compression in the image document window as you adjust the Quality in the Image Options section. This shows how the image will look when it is reopened as a JPEG. The JPEG Options dialog box also indicates the compressed file size in kilobytes, although this is just an approximation.

If you save a master file as a JPEG and then decide the file needs further compression, you can safely overwrite the last saved JPEG using a lower JPEG setting. For as long as the image is open in Photoshop, all data is held in

Orphan works

With any photos that you upload to the Web, it is important to take precautions against future government legislation that may permit others to use photographs that are deemed to be 'orphan works', because the original copyright owner cannot be found. It is possible to upload photos to sites such as Flickr and retain all the copyright metadata, while other upload processes may delete this data. One way to be absolutely sure is to incorporate a visible watermark in everything you publish to the Web.

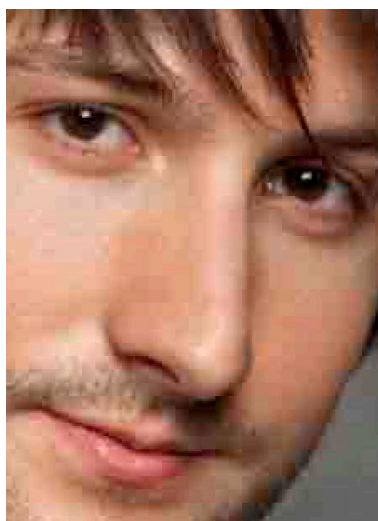


Figure 2 This shows a close-up view of a JPEG image that was saved using the 0 Quality setting in Photoshop. This clearly reveals the underlying 8×8 pixel mosaic structure, which is how the JPEG compression method breaks down the continuous tone pixel image into large compressed blocks. At the higher quality settings it is impossible to see a difference between JPEG compressed and uncompressed images.

Photoshop's memory and only the version saved to the disk is degraded. It is therefore possible to repeat saving an image using the JPEG format. However, once an image has been compressed using the JPEG format and is reopened, it is not a good idea to repeatedly resave it as a JPEG again, since this will only compound the compression that's already been applied to the structure of the image. Having said that, unlike other programs, the JPEG compressor used in Photoshop converges, so that after repeated opening and saving using the same JPEG settings (and without modifying the pixels), the data loss diminishes with every save, to the point where there is little or no further loss.

The JPEG format can primarily be used to send smaller sized email attachments and ensure that visitors to your website don't have to hang around while the images download. You can also use the JPEG format to archive images for faster electronic distribution or when you are forced to save a large file to a restricted amount of disk space. For example, a 10" × 8" RGB file at 300 ppi resolution would normally be about 20 MB in size, if saved as a TIFF. By saving it as a high quality JPEG this same file can often be reduced to as little as 1 MB with hardly any degradation to the image quality. Some purists argue that JPEG compression should never be used under any circumstances when saving a photographic image. It is true

Saving 16-bit files as JPEGs

For those who prefer to edit their images in 16-bit, it was always frustrating when you would go to save an image as a JPEG copy, only to find that the JPEG option wasn't available in the Save dialog File Format menu. The reason for this was because 16-bit isn't supported by the JPEG format. With Photoshop, when you choose Save As... for a 16-bit image, the JPEG file format is now available as a save option, where the file is converted on-the-fly to an 8-bit JPEG, without further intervention. This allows you to quickly create JPEG copies without having to temporarily convert the image to 8-bit mode. Note that only the JPEG file format is supported in this way.

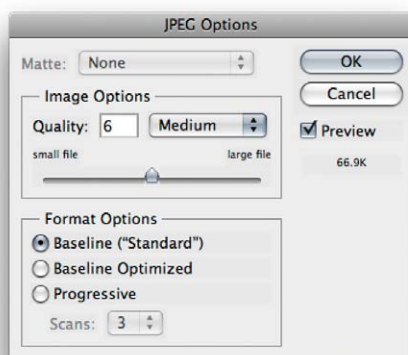


Figure 3 This shows the JPEG Options save dialog box. Baseline ("Standard") is the most universally understood JPEG format option and one that most web browsers will be able to recognize. Baseline Optimized will often yield a slightly more compressed sized file than the standard JPEG format and most (but not all) web browsers are able to read this correctly. The Progressive option creates a JPEG file that will download in an interlaced fashion (the same way you can encode a GIF file).

that if a TIFF file is saved using JPEG file compression there are some instances where this can cause problems when sending the file to some older PostScript devices. Otherwise, the image degradation is barely noticeable at the higher quality compression settings, even when the image is viewed on the screen in close-up at a 2:1 view.



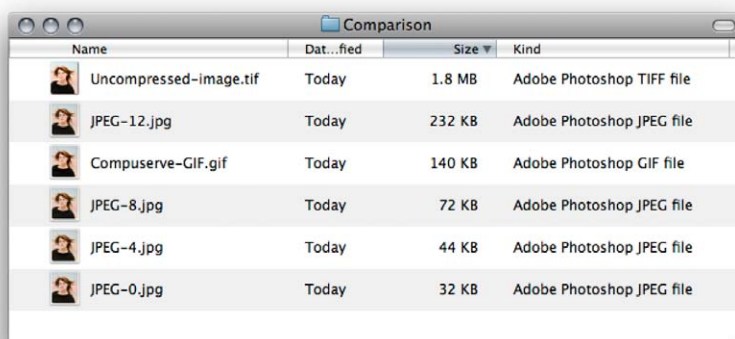
Figure 4 Here are two JPEG images: both have the same pixel resolution and both have been saved using the same JPEG quality setting. Yet the Sahara desert image compresses to just 21 kilobytes, while the gas works picture is over three times bigger at 74 kilobytes. This is because it contains a lot of extra detail. The more contrasting sharp lines there are in an image, the larger the file size will be after compression.

Keeping files small

Only one thing matters when you publish images on the Web and that is to keep the total file size of your pages as small as possible. The JPEG format is the most effective way to achieve file compression for continuous tone photographic images, but graphics that contain fewer, distinct blocks of color should be saved using the GIF format. Some web servers are case sensitive and won't recognize capitalized file names. If this is likely to be the case, you can go to the Photoshop Preferences File Handling section and make sure the 'Use Lower Case Extensions box' is checked.

Choosing the right compression type

JPEG compression offers the most effective way to reduce file size, but this is achieved at the expense of throwing away some of the image data (as was demonstrated in Figure 2). JPEG is therefore known as a lossy format, so you need to be careful not to apply any more compression than is necessary. If you refer to Figure 5 below you can compare the different file sizes that were obtained when saving a 500 × 600 pixel image using different JPEG settings. As an uncompressed, 8-bit RGB TIFF, this file was 1.8 MB in size. When saved using the highest JPEG quality setting there was barely any degradation to the image, yet the JPEG file size was just 232 kilobytes, or 12% of its original file size, which is quite a saving. When a medium (8) JPEG quality setting was used the file size was reduced further to just 72 kilobytes. This is probably about the right amount of compression to use when preparing photographs to go on a website where you wish to strike the right balance between maintaining decent image quality, yet still keep the files compact in size. The lowest compression setting squeezed the image down to just 34 kilobytes, but at this level photographic images are likely to appear extremely 'mushy' and the lower quality settings are therefore best avoided.



Name	Date modified	Size	Kind
Uncompressed-image.tif	Today	1.8 MB	Adobe Photoshop TIFF file
JPEG-12.jpg	Today	232 KB	Adobe Photoshop JPEG file
Compuserve-GIF.gif	Today	140 KB	Adobe Photoshop GIF file
JPEG-8.jpg	Today	72 KB	Adobe Photoshop JPEG file
JPEG-4.jpg	Today	44 KB	Adobe Photoshop JPEG file
JPEG-0.jpg	Today	32 KB	Adobe Photoshop JPEG file

Figure 5 Here we have one image saved six different ways, where each method produces a different file size. The opened image measured 500 × 600 pixels and the uncompressed TIFF file size was 1.8 MB. Below that are the JPEG versions which were saved using different quality settings. Lastly, a GIF version was saved, which as you can see, does not offer the most efficient compression method and is unsuitable anyway for saving most kinds of photographic images.

Lossless and lossy compression

The LZW and ZIP methods of compression are lossless. They can reduce the file size, but without degrading the image. The JPEG compression is lossy and you can only use it when saving TIFF images that have been converted to 8-bits per channel (although you can preserve the layers when saving a TIFF image using the JPEG compression method).



TIFF compression for FTP transfer

I mention the TIFF format again here because it is the standard file format used for transferring files used for pre-press work. If you save a layered image as a TIFF using no image compression beyond the Run Length Encoding (RLE) layer compression, the uncompressed TIFF format doggedly records every pixel value and will therefore be large in size. If you need to speed up the time it takes to transfer TIFF files via the Internet, such as when sending TIFF files via the www.yousendit.com FTP service, you might want to employ one of the compression methods described below in Figure 6. As you can see, TIFF files compressed with LZW, ZIP or JPEG and with ZIP-compressed layers, can cut the file size down by half or more. The only downside is that the save times will be noticeably slower and not all RIPs accept files in a compressed TIFF format.

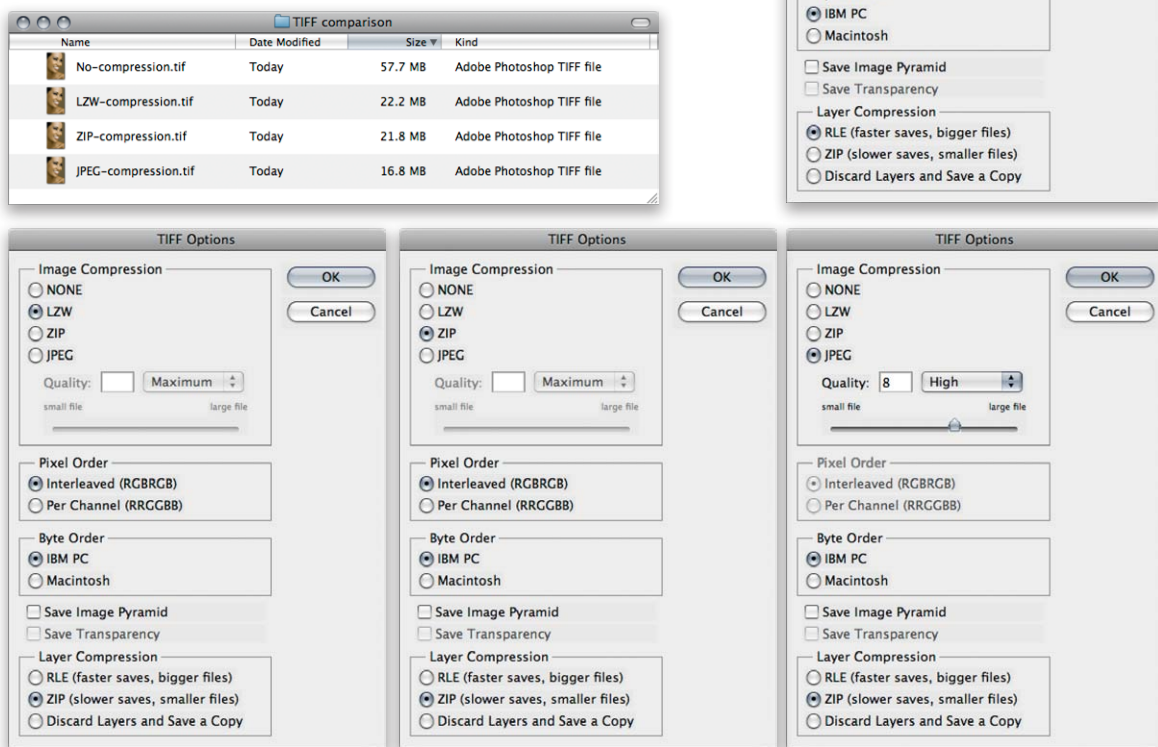


Figure 6 Here, I took an 8-bit, layered, RGB TIFF image saved with no compression (which was 57.7 MB in size) and saved it using three different methods of TIFF compression. The lossless LZW and ZIP compression methods efficiently reduced the file size to less than half the original size, while the JPEG compression method had the potential to reduce the TIFF file size even further (while being lossy).

GIF

The GIF (Graphics Interchange Format) is normally used for publishing graphic style images such as logos. Some people pronounce GIF with a soft G (as in George) and others use a hard G (as in garage). Neither is right or wrong as both forms of pronunciation are commonly used. Or as Julieanne Kost likes to say: “it’s pronounced, get a life!”

To save an image using the GIF format, it must start off in 8-bit RGB mode. Saving as a GIF converts the image to Indexed Color mode. This is an 8-bit color display mode where specific colors are ‘indexed’ to each of the 256 (or fewer) numeric values. You can select a palette of indexed colors that are saved with the file and choose to save as a CompuServe GIF. The file is then ready to be placed in a web page and be viewed by web browsers on all computer platforms. Photoshop contains special features to help web designers improve the quality of their GIF outputs (Figure 7), such as the ability to preview Indexed mode colors whilst in the Indexed Color mode change dialog box, and an option to keep matching colors non-dithered. This feature can help you improve the appearance of GIF images and reduce the risks of banding or posterization. Be aware that when the Preview is switched on and you are editing a large image, it may take a while for the document window preview to take effect, so make sure that you resize the image to the final pixel size first.

You will find that when designing graphic images to be converted to a GIF, those with horizontal detail compress better than those with vertical detail. This is due to the GIF format using Run Length Encoding (RLE) compression.

PNG (Portable Network Graphics)

The PNG file format can be used for the display and distribution of RGB color files online and is also available as a file format option in Save for Web. PNG (pronounced ‘ping’) features improved image compression and allows the saving of alpha mask channels (for creating transparency) to be saved with the image. Other advantages over JPEG and GIF are higher color bit depths, support for channels and limited built-in gamma correction recognition, so you can view an image at the gamma setting intended for your monitor. Mozilla’s Firefox and Microsoft’s Internet Explorer web browsers support the PNG format, as does Apple’s Safari web browser program.



Figure 7 The GIF file format is mostly used for saving graphic logos and typography. The picture shown here is one that was used for the cover design of an earlier edition of this book. This is also a good example to illustrate the type of image that would be suitable for saving in the GIF format for use on a web page design. Note that the image contains a large amount of solid red and few other colors. This photograph was reduced in size to around 350 x 300 pixels. I then converted the image to Index Color mode using a palette of 16 colors. When the image was saved as a GIF it measured a mere 19 kilobytes.

Run Length Encoding (RLE)

This is a simple and popular data compression algorithm in which a long sequence of identical pixel values is replaced by a shorter sequence which summarizes the pixel content. For example, where you have say, a continuous tone color value repeated in an image, rather than record every pixel value individually, the pixel sequence can be summarized more compactly.

Save for Web

The Save for Web option (**⌘ ⇧ S** [Mac], **ctrl alt Shift S** [PC]) can be accessed via the File menu. This comprehensive dialog interface (Figure 8) gives you complete control over how images can be optimized for Web use, offering a choice of JPEG, GIF, PNG-8 or PNG-24 formats. The preview display options include: Original, Optimized, 2-up and 4-up views (Figure 8 shows the dialog window in 2-up mode display). With Save for Web you can preview the original version of the image plus up to three variations using different web format settings. In the annotation area below each preview,

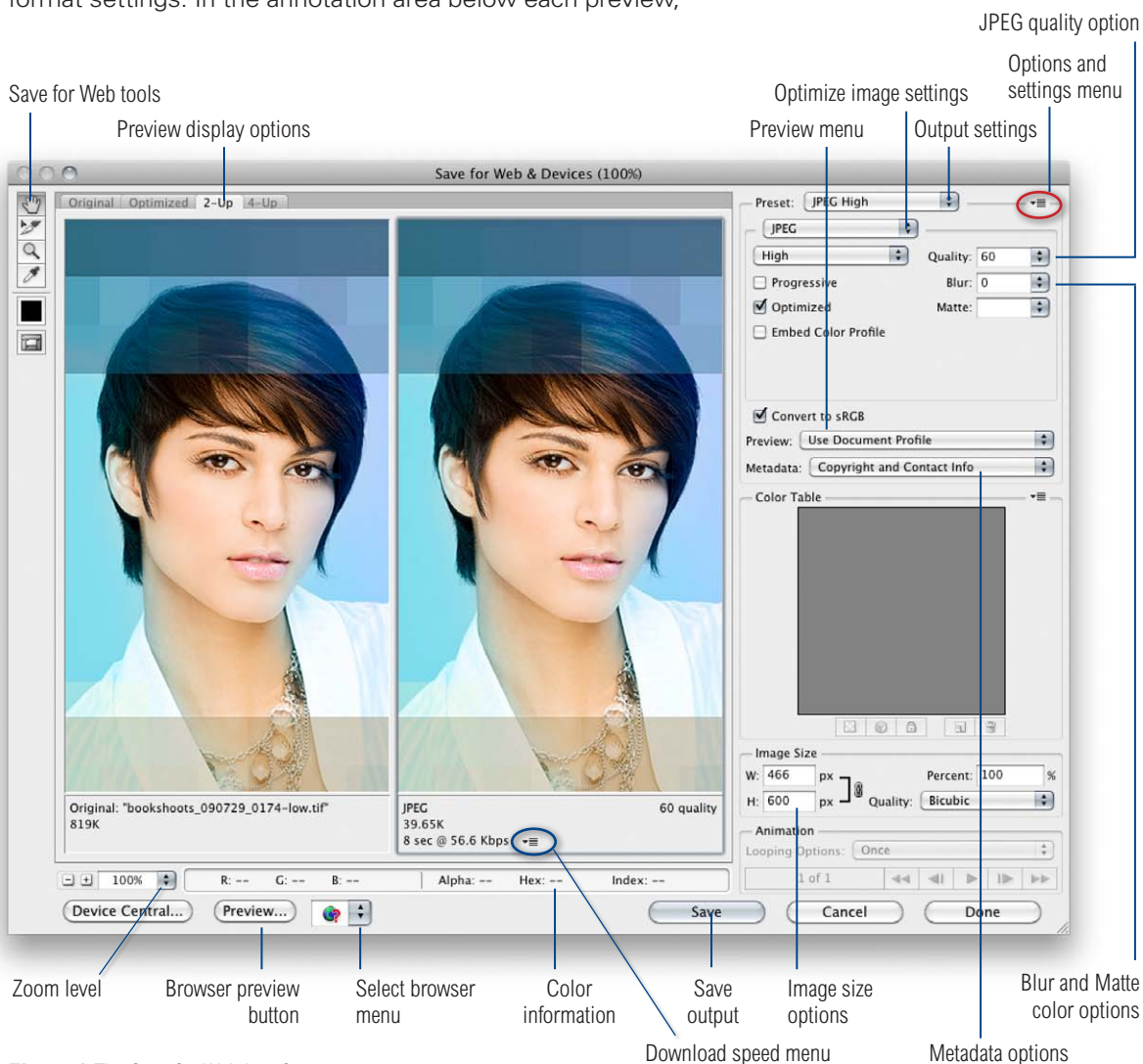


Figure 8 The Save for Web interface.

you can make comparative judgements as to which format and compression setting provides the best payoff between image quality and file size, and also determine how long it might take to download at a specific modem speed. Use the N-up Download speed menu (circled in purple) to select from a list of modem and Internet connections on which these download times are based.

Web browser previews

The Select Web Browser menu allows you to select which web browser to use when you preview a document that has been optimized for the Web, such as the example shown in Figure 9, where I was able to preview the Save for Web image using the Firefox web browser. You can use the Preview menu list to select a preview setting and simulate how the web output will display on either a Macintosh display, a Windows PC display or with Photoshop compensation. Although, these days I reckon it is safe to assume that everything will be viewed on a monitor using the PC 2.2 gamma standard.

Optimize image settings

The Optimize image settings section has an option that allows you to apply Progressive JPEG formatting. Most browsers such as Firefox and Internet Explorer support this enhancement, whereby JPEGs can be made to download progressively interlaced, the way GIFs can. If you check the 'Optimized' checkbox this option can be used to apply more efficient compression, but again is not generally compatible with older web browser programs. The quality setting can be set as Low, Medium, High, Maximum or set more precisely as a value between 1 and 100%. The Embed Color Profile option can be considered useful for those few browsers that do recognize profiles (such as Safari). However, many don't and the downside of including an ICC profile is that this simply adds to the overall web image file size, so I suggest you only use this option in special circumstances. The Blur control allows you to soften an over-sharpened original and obtain further file compression when using the JPEG format. You can also refine the amount of metadata that is saved with the Web output images. Limiting the amount of saved metadata can help keep the file size small.

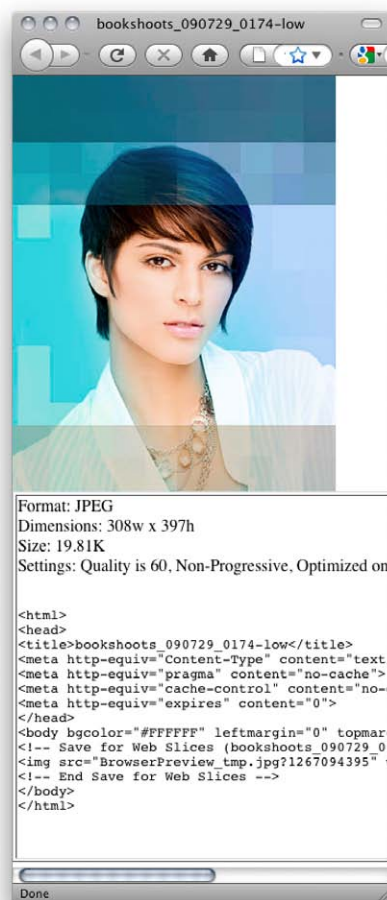


Figure 9 When you click on the browser preview button, it opens a temporary page like the one shown here. This allows you to preview the Save for Web processed image as it will appear on the final web page. This is especially useful for checking if the RGB editing space used is recognized differently by the browser. So if you are relying on embedded ICC profiles to regulate the color appearance on screen, you can check to see if the profile is indeed being recognized by the selected web browser program.

Once you have configured these settings, you can go to the options and settings menu (circled in red) and choose 'Save Settings...' You can then name the settings so that you can access them again in the future via the Presets menu.

The Image Size options are fairly similar to those found in the Image ⇨ Image Size dialog box. Just simply enter the new percentage with which to scale the image and check what impact this has on the file size (this changes the file size in all the optimized windows). An alternative approach is to select Optimize To File Size from the fly-out menu (see Figure 10). You can use this to get the optimized file to match a specific kilobyte file size. If you wish, you can have Photoshop automatically determine whether it is better to save as a GIF or JPEG.

Save options

The Save for Web dialog lets you save your output using: 'Images only', 'HTML only' or 'HTML and Images' (Figure 11). If you select 'Images Only', this simply saves a Web-ready image that you can use to place in a website design such as a blog entry, or as an image ready to email. If you select the 'HTML and Images' option, you can generate an HTML file with a link to the image, which will be placed in an accompanying 'images' folder.

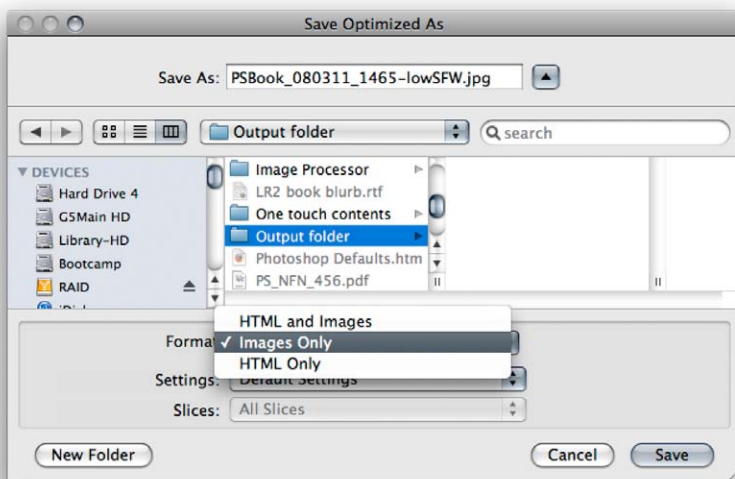


Figure 11 The Save for Web save options

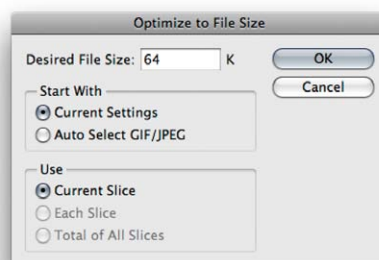


Figure 10 If you mouse down on the options and settings menu (circled in red in Figure 8) you can choose Optimize to File Size, which opens the dialog shown here, where you can set a desired file size to optimize an image to.

Edit Output Settings

The Edit Output Settings option (in the Options and Settings menu) lets you determine the various characteristics of the Save for Web output files such as: the default naming structure of the image files and slices; the HTML coding layout; and whether you wish to save a background file to an HTML page output.

Efficient JPEG saving

The Save for Web dialog may look intimidating, but once you figure out which settings need concern you, simply save these as a custom setting. I have also recorded the Save for Web as an action step, so that I don't even need to look at this dialog. The main thing to be aware of here is that Save for Web offers the most efficient way to prepare images for Web use, since it automatically strips out all previews and this can make your web images dramatically smaller compared to using File ⇨ Save As... to save as a JPEG.

GIF Save for Web

The GIF Save for Web options (Figure 12) are also quite extensive. You have the same control over the image size and can preview how a resulting GIF will appear on other operating systems and browsers – the remaining options all deal with the compression, transparency and color table settings that are specific to the GIF format. The choice of color reduction algorithms allow you to select the most suitable 256 maximum color palette to save the GIF in, which includes the 8-bit palettes for the Macintosh and Windows systems. These are fine for platform-specific work, but such GIF files may display differently on the other system's palette. The Perceptual setting produces a customized table with colors to which the eye is more sensitive. The default Selective setting is similar to the Perceptual table, but more orientated to the selection of web safe colors. This is perhaps the best compromise solution to opt for now as every computer sold these days is able to display 24-bit color. The Adaptive table palette samples the colors which most commonly recur in the image. In an image with a limited color range, this type of palette can produce the smoothest representation using a limited number of colors.

The Diffusion dithering algorithm is effective at creating the impression of greater color depth and reducing any image banding, and the Dither slider allows you to control the amount of diffusion dithering (the Pattern and Noise options have no dither control). If the image to be saved has a transparent background, the Transparency option can be kept checked in order to preserve the image transparency in the saved GIF. To introduce transparency in an image you can select the color to make transparent using the eyedropper tool and then click inside the image preview area. The color chosen will appear selected in the color table. Select one or more colors and click on the Map Selected Colors to Transparent button in the Color Table (see Figure 13). You can then apply a diffusion, pattern or noise dither to the transparent areas, which can help create a smoother transparent blend in your GIF images.

The Lossy option allows you to reduce the GIF file size by introducing file compression. This can be helpful if you have an overlarge GIF file, but applying too much compression will noticeably degrade the image until it looks like a badly tuned TV screen. The 'Interlaced' option can make the image appear to download progressively in strips, but adds slightly to the file size.

Web palette colors

The web palette contains the 216 colors common to both platforms and is therefore a good choice for web publishing if viewers are limited to looking at the image on an 8-bit color computer display. Now to be honest, restricting your colors to a web palette should not really be that necessary these days, but the option is still there. However, the Web Snap slider lets you modify the color table by selecting those colors that are close to being 'browser safe' and making them snap to these precise color values. The Web Snap slider determines the amount of tolerance and you can see the composition of the color table being transformed as you make such an adjustment.

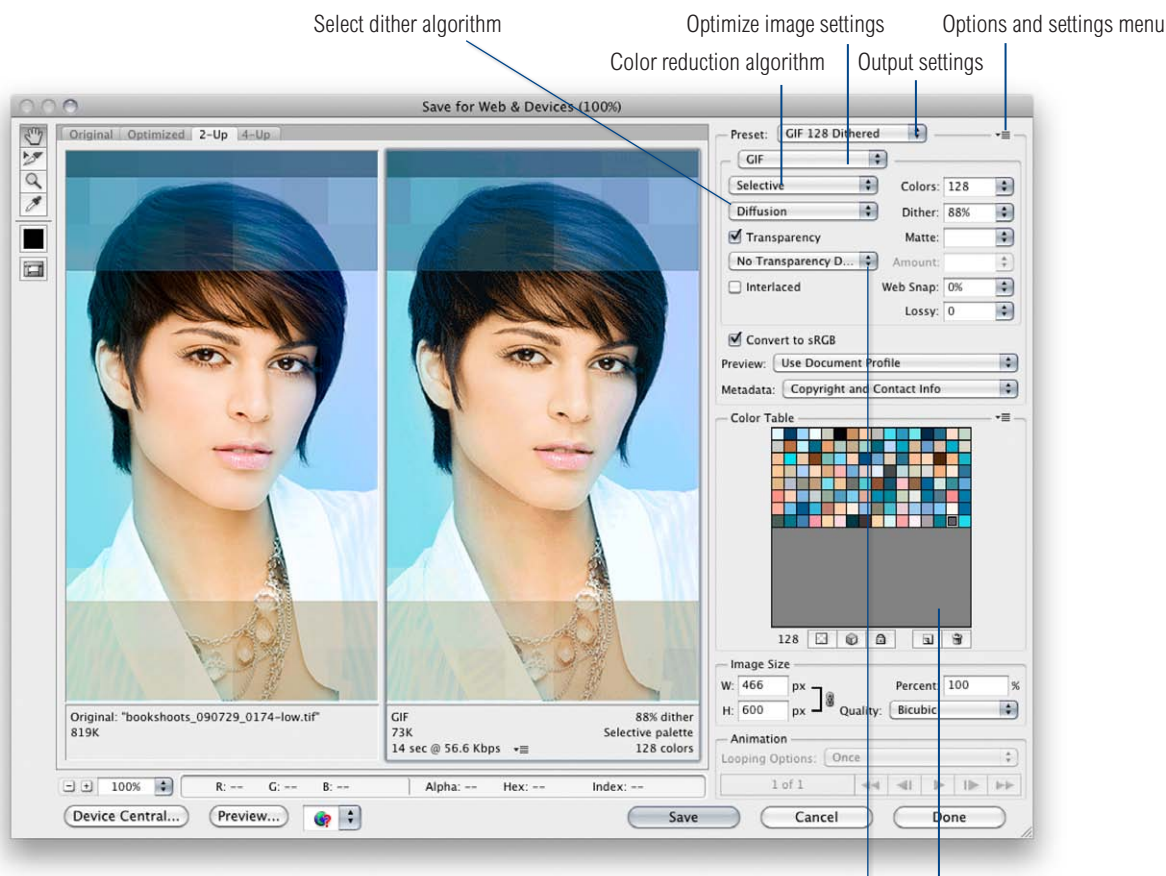
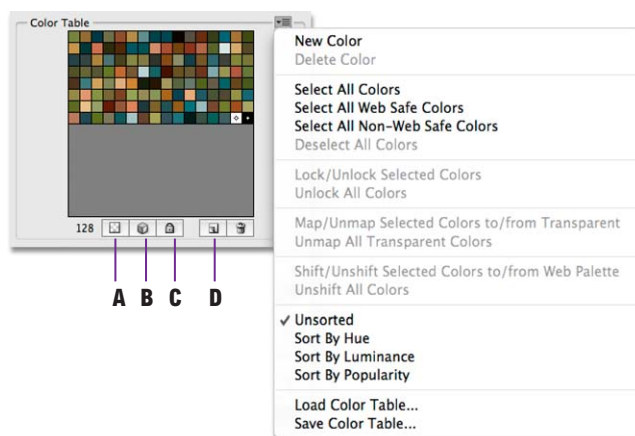


Figure 12 The Save for Web interface showing the GIF settings.

Transparency options Color table

Figure 13 This shows a close-up of the color table showing the Color palette options menu.

- A: Maps the selected color to transparency.
- B: Shifts/unshifts selected colors to the Web palette.
- C: Locks the color to the palette to avoid deletion.
- D: Adds an eyedropper-selected color to the palette



Zoomify™ Export

The Zoomify™ Export option in the File menu allows you to create an output folder containing all the necessary components to produce zoomable image web pages (Figure 14). Visitors are then able to view the pages created with the Zoomify export plug-in so long as they have an up-to-date Flash plug-in for their browser. Zoomify pages are ideal for portfolio presentations and commerce websites, where customers can easily view large images in close-up. If you go to the Zoomify website at www.zoomify.com, you can see some examples of customer sites where the Zoomify export plug-in has been used.

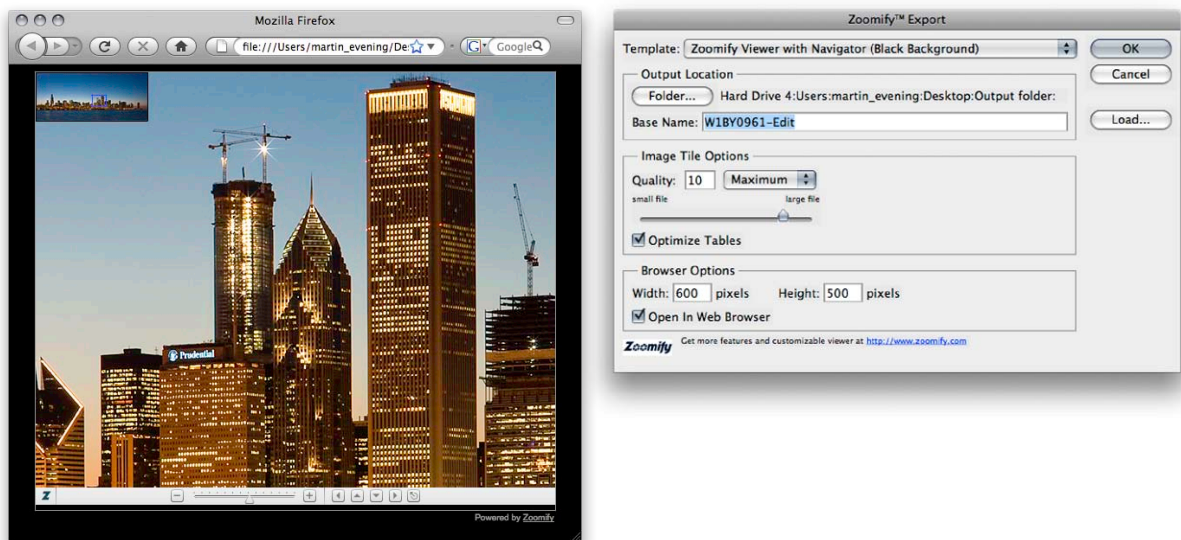



Figure 14 Here is the Zoomify™ Export dialog box, showing the typical settings that might be used to create a zoomable image. When you click OK this creates a folder containing all the necessary components to display a zoomable image on the Web. Once created, all you have to do is upload the folder to your website and add the /foldername/basefilename.htm/ to the usual URL weblink (note that the base file name referred to here is based on the image's file name). Visitors to such pages can left mouse-click on an area of interest to zoom in and —click to zoom out. You can mouse down and drag to scroll, or use the navigator preview to select an area of interest to scroll to. There are no usage fees or restrictions on the usage of this plug-in. As is mentioned on the Zoomify Web site: “We simply ask you not to decompile the Zoomify Viewer SWF file, not to redistribute the Zoomify Viewer source code (available in the Zoomify Flash product), and not redistribute the Zoomify Converter. Your content is yours, and redistributing the Zoomify Viewer swf is encouraged.”