Ready Net Go, Inc.

IT Solutions for Businesses ... *Moving Forward*

■ Optimizing Images - Re-Sizing

Have you ever tried sending a photo to someone via email but they never received it or you clicked send and a half hour later it's still sitting in your email Outbox? One reason could be that the email is too large for your Internet Service Provider (ISP) to process. As an example, if you attach five 3 MB files to an email message, you are sending a whopping 15 MB email - too large for most ISPs to process.

While digital cameras and images have made life much simpler for a lot of people, they do require some editing if you want to email photos or upload them to a website. We'll go over a basic feature of image optimization in this newsletter, size reduction, which will hopefully clear up some problems you may be having.

Larger resolutions and other technological advancements on digital cameras make taking photos a pleasure nowadays and printing your own photos on an inkjet printer gives you near instantaneous results compared to sending the film out to a lab for processing. Photos are now bigger, bolder and oftentimes crisper. These benefits come at a price though; increased file size.

Image files are similar to other files like Word docs, Excel spreadsheets or PowerPoint presentations. The more information that is included in the document, the larger the file size will be. Images work the same way. If you have a digital camera that is rated at 3 megapixels, each photo you take will capture about 3,000,000 pixels. If you have an 8 megapixel camera, each photo will capture about 8,000,000 pixels. The more pixels, the sharper the image. Since the sharper image has more pixels, the file size for each photo will be greater, unless you manually adjust the resolution on your camera before taking the shot (most digital cameras use the highest resolution as the default).

Larger files require more storage space, such as on a hard drive or external drive, and they require more time to upload or download for both email applications and websites. If you want to send a photo to someone and they are just going to look at it on their computer or you want to post a photo on a website, you can and should reduce the image size before emailing or uploading. In most cases, reducing the image size will save time while still preserving clarity.

■ Tip of the Month ...

Photo Editing Software Features

Resize - By resizing, you are either increasing or decreasing the entire picture. Reducing images makes them smaller but usually does not impact clarity. Increasing the size of images beyond the original resolution will distort them.

Crop - Refers to selecting a part of an image and cutting it out to remove objects you don't want. Cropping can be a method of resizing although the end result may still be too large for emailing or uploading to the web.

Rotate - Rotate images anywhere between 0 and 360 degrees. If your image is skewed, you can rotate and crop it to make it straight.

Colors - You can change numerous options in regards to color such as hue, saturation, monochrome, sepia, contrast and much more.

Borders - Add a straight or curvy border; smooth line or dots; add color or even a drop shadow.

■ Websites Worth Watching

1. visitphilly.com/ - Friends or relatives coming in for the holidays? Get the scoop on popular things to do and places to see in the Philadelphia area.

2. hgtv.com - Home & Garden TV is not just on TV. Check out their website for entertaining tips this holiday season.

Common Image Formats

1. GIF (pronounced jif) - these files are suitable for text, drawings, line art or other graphics, either static or animated. Gif's are generally not used for photographs. It is a lossless, uncompressed format that retains all of the data captured.

2. JPG (pronounced j-peg) - these files are suitable for photographs as they can be compressed without losing much image quality. Most digital cameras save images in the jpg format. Jpg is considered a lossy format for two reasons:

   a. some information is intentionally left out in order to decrease the file size; and

   b. once compressed, if the image is then decompressed (or returned to its original resolution), it will not retain the original image quality.

3. BMP (pronounced bitmap) - these files are a standard MS Windows image format. It is a lossless, uncompressed format preserving all of the data.

4. TIFF - these files are a lossless format that maintains all of the captured data. File sizes are generally larger than the other formats listed here. In the image editing world, TIFF is used for archiving purposes or for printing high quality images. TIFF files should never be posted on a website or emailed.

5. RAW - this file format is considered the gold standard amongst professional photographers. It is a lossless format that preserves all data. File sizes are very large (can be 20+ MB) and should never be emailed or placed on a website. RAW images are primarily saved for archiving, printing, or generating other formats such as .jpg.

How to Modify Images for Email or Web

1. Transfer your photos to your PC. **Windows Explorer** is a great program to view, copy, and move your photos. If you don't already have a shortcut for Windows Explorer on your desktop or in your Quick Launch bar, you can find it by clicking **Start**, mousing over **All Programs**, then **Accessories**, then scrolling down and clicking **Windows Explorer**.

2. To detect file sizes in Windows Explorer, the **Details View** must be shown. Click on the folder where your photos are stored. Click View on the Main Menu, then scroll down to Details. In the right pane, you will see a header for Size. The sizes in Windows Explorer will always show KB. 1,024 KB equals 1 MB. Other sizes could be: 3,036 KB which is approx. 3 MB; 6,011 KB which is approx. 6 MB; etc.

3. If your image or photo is greater than 1 MB (1,024 KB), we strongly recommend reducing the size if you are going to email or publish it to a website. If someone needs the larger file (for editing or printing), find another method of transfer such as via flash drive or CD/DVD.

4. To modify the image size, an image editor is needed. Any third party image editor can be used (Photoshop Elements, picnik, etc.) or you can use **Microsoft Picture Manager** that is included with all copies of MS Office software.

5. To open MS Picture Manager, click Start - All Programs - Microsoft Office - Microsoft Office Tools - Microsoft Office Picture Manager.

6. Once opened, click File, Open..., to open the image you want to resize. Click **Edit Pictures** either on the main menu or on the right side pane.

7. On the Edit Pictures pane (right side) at the bottom, click **Resize**.

8. Choose your resize settings using one of the radio buttons. Predefined with x height is a good bet as it has listings for both web and email. Make a selection, choose **OK** and the photo will automatically resize in the window.

9. On the main menu, select File, Save as ..., navigate to the correct folder, enter a new filename, then click Save. **Important:** make sure to save your newly reduced photo with a different name and **keep the original in case you need it in the future**.

10. Now attach your newly reduced image to an email and watch it fly quickly out of your Outbox.