

Image Optimization

There are many different types of software for compressing images in compact formats for the web. The purpose of this article is to describe the characteristics of an optimized image, list key features of most image optimization tools, and demonstrate how to use these tools effectively.

To gain proficiency in image optimization the user must first understand a few basic concepts:

1. Image Dimensions: Physical height and width of the image.
2. Image Resolution: The amount of pixels per inch displayed. For the web, resolution is 72 pixels per inch. All standard web image formats, such as jpg, gif, and png, automatically default to 72 dpi to keep file size to a minimum.
3. Image Size: Actual file size of the image, ex. 20K. (K = kilobytes, MB = megabytes)
4. File Types: The web displays images in the following file types: jpg, gif, and png. However, the most commonly used types are jpg and gif. Jpg format is used to display photographs and images that contain many colors. Gif format is used to display line art, text, and solid color images such as logos.

Active Data Calendar 3.2 is designed to make uploading images as simple as possible. The only image constraint is file size, which is limited to 80K (Kilobytes). There is no maximum height and width, however, it is important to remember that the larger the image dimensions, the larger the file size. Therefore, height and width can directly affect whether your image meets the upload requirements. This is where web optimization tools become necessary.

There are 3 major ways to decrease image size for web optimization:

1. Modify the image dimensions: Most web optimization tools have the ability to change the image dimensions by reducing the height and width. This is usually found under image attributes/properties. If it is an option make sure that "constraint proportions" is enabled so that the height and width change in proportion to each other.
2. Modify the image resolution: This is usually found in the same place as the image dimensions because they directly relate to each other. As image resolution decreases so does the overall image dimensions. For example an image that is 400x250 at 300 pixels per inch is 305K. This file is too large for the web. When the image is converted to 72 pixels per inch the dimensions reduce to 100x60 and the file size is 18K.
3. Crop the image: Many image editors also have the ability to crop the image. This is accomplished by using the crop tool. Crop can usually be found in the image editor's tool palette. Use the crop tool to outline the important area of the image, and delete the excess image.