

4-1 Images on your website

<http://www.websuburb.com.au/HelpDesk/Images/tabid/179/Default.aspx>

We will look at sizing and preparing images (especially digital camera photos) and the kind of file to save for uploading to the website. A limited amount of technical background is covered to better understand the process.

Preparing images involves essentially the following steps:

- Sizing images
<http://www.websuburb.com.au/WebsiteHelp/Images/Sizingimages/tabid/189/Default.aspx>
- Compressing images
<http://www.websuburb.com.au/WebsiteHelp/Images/Compressingimages/tabid/192/Default.aspx>
- Uploading images
<http://www.websuburb.com.au/WebsiteHelp/Images/Uploadimages/tabid/188/Default.aspx>

4-1.1 The golden rules of web images

1. **Smaller files are better** – smaller files download faster, improving the user experience and reducing risk of user moving on to another site.
2. **Beauty is in the eye of the beholder** – every user's perception of image quality is different. Beware of trying to get perfect image quality at the risk of losing your user with slow download times.
3. **If in doubt smaller is better**

Our goal is to achieve the smallest file size consistent with the desired image quality

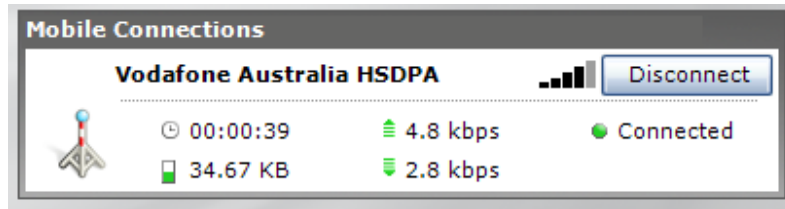
4-1.2 How small and why?

Simply because smaller files download faster.

Usability experts maintain that the average **user will stay on a web page for 8 - 10 seconds**. Files should be small enough to enable the entire page to load in under 10 seconds.

According to Australian Bureau of Statistics, 40% of households in Australia connect to the internet via dialup modem. Most of these are 56k [kilobits per second] dialup services. This means that the total page size needs to be less than around 60kb [kilobytes]. A standard DotNetNuke page overhead (i.e. layout script) is around 20kb therefore the images on a page should ideally be less than 30kb.

Anecdotal evidence for mobile users suggests that download speeds may be relatively low. e.g.



A postcard size photo from a digital camera at 3.5mb [1 megabyte = 1,000kb] resolution generates a jpeg file of around 750kb. I.e. probably about 20 seconds of download time. This is way too long.

4-1.3 Image quality!

You are the only person who can decide whether image quality is acceptable or not.

When using jpg, jpeg or gif files the size of the file is dependent on the width and height of the image, sampling density as well as the range and complexity of colours contained in the image.

Tip! If you need to present a high resolution image try presenting a thumbnail with a link to a larger image or PDF file that the user can choose to open or consider using a slide show or image catalogue module that automatically manages the thumbnail sizing.

Some slightly technical stuff about image files. Image editors “sample” the pixels (the tiny dots, similar to grains in a photograph, used to make up an image) and then interpolate the “missing” dots when the image is displayed again.

Images with subtle colour changes such as landscapes, seascapes and sun-sets tend to deteriorate more than images with sharp contrasting colours.

4-1.4 Image File types

There are many image file types available. The three most popular types for the web are JPG, GIF and PNG. I found most of the information for this table to provide a simple comparison for deciding which file type to choose at www.microsoft.com

Feature	JPG	GIF	PNG
Number of colours	Millions	256	Millions
Interlace i.e. improves the user experience by appearing with a poor resolution image and then improves as the rest of the image arrives.	No	Yes	No
Transparent background	No	Yes	Yes
Colour Photos	Yes	Poor	Yes
Black and white photos (i.e. up	Yes	Yes	Yes

How to create your own website in 24 hours

to 256 shades of grey)			
Summary	Useful to control file size by adjusting image quality	Best for a few distinct colours, line art graphics and well defined shapes	Not supported by all browsers. Requires a plug in to work.

Next – learn how to upload images to your DotNetNuke website

<http://www.websuburb.com.au/HelpDesk/Images/Uploadimages/tabid/188/Default.aspx>