

Tutorial

Optimise an image for upload to Matrix



Preparing an image for upload to Matrix

When uploading an image to Matrix, you must ensure that it fits two requirements:

- It is 881 pixels wide by 585 pixels high
- The file size is no bigger than 70 kilobytes

You will need Photoshop to do this, but your PC may have the software installed as standard. If not, you can download it from the Software Centre.

You should work from the 'original' version of the image, saved in Scan Libraries. This will ensure it is large enough and of good enough quality to be used - either a file generated by a digital camera, or one downloaded from a stock image supplier like Thinkstock.

Resizing the image

File Edit Image Layer Type Select. Filter 3D Vie . Mode Sty ۶ Adjustments bioscience.j Auto Tone Shift+Ctrl+L ÷. Auto Contrast Alt+Shift+Ctrl+L ED), Click on 'Image Size' Auto Color Shift+Ctrl+B Q. Ait+Ctrl+| Image Size... Canvas Size ... Alt+Ctrl+C 4 Image Rotation Ъ. Crop 1. Trim... Reveal All ø. Duplicate... 1. Apply Image... 1 Calculations... 7 Variables **A**. Apply Data Set... Trap... 0. . Analysis

Open the image in Photoshop. Click on 'Image' at the top of the screen

This will open a window:

Image Size			×
Image Size:	28.7M		¢.
Dimensions:	~ 3888 px	× 2584 px	
Fit To:	Original Size		Ý
Width:	3888	Pixels	
Height:	2584	Pixels	
Resolution:	72	Pixels/Inch	~
Resample:	Automatic		
ОК	$\neg c$	Cancel	

There is a 'chain' icon in the middle of the window. Make sure there are lines running from it over to the Width and Height fields. If there are no lines, click on the chain icon to put them in place.

Image Size				×
Change the width to '881'	h Image Size: 1.48M (was 28.7M) Dimensions: 👻 881 px × 586 px			٥.
R.	Fit To:	Custom		~
	Width:	881	Pixels	
	• Height:	586	Pixels	
har th	Resolution:	72	Pixels/Inch	
Click 'OK'	✓ Resample:	Automatic		
	ОК	\square	Cancel	

This should have automatically changed the height to 585, or a number very close to that. If it is not exactly 585, the image will need to be resized to fix it. There are instructions below.

If the image now looks very small, hold down Ctrl and press 1. This will make it display at its correct size.

Adjusting the height to 585 pixels

When the image has been resized to 881 pixels wide, it may not be exactly 585 pixels tall. If so, it will need to be altered.

Click on 'Image' at the top of the screen



This will open a window:

Canvas Size				×	
Current Size: 1.48M Width:	881 Pixels			ОК	
New Size: 1.48M	DB0 Pixels			Ame	end height to 585
Width:	881	Pixels	*		
Height:	586	Pixels			
	Relative				
Anchor:	$\begin{array}{c} \mathbf{x} + \mathbf{x} \\ \mathbf{x} + \mathbf{x} \\ \mathbf{x} + \mathbf{x} \\ \mathbf{x} + \mathbf{x} \end{array}$				
Canvas extension color:	Background				

You'll see a warning saying "The new canvas size is smaller than the current size; some clipping will occur". This is fine – click 'Proceed'. Now the image needs to have the file size reduced.

Reducing the file size

Heavy images take longer to load, and on a 4G connection or lower this can become a problem for page load times. Therefore it is important for images file sizes to be as small as possible.

Reducing the dimensions of the image will automatically drop the filesize, though this may not be enough to bring it under 60 kilobytes. But the image quality can be manipulated to drop it further.



Click on 'File' at the top of the screen

On some versions of Photoshop, 'Save for Web' might be directly under the File menu.



This will open a window displaying the image on the left, with menu options on the right.

The screen will reload with two versions of the image side-by-side. You will now be able to make changes to your new image (on the right), while comparing them with the original image (on the left).





At the top right of the window, there is a dropdown displaying sizes:

You can now change the quality of the image on the right, dropping it until the file size goes down to 70 kilobytes. As you do so, you can compare how it looks with the image on the left, checking the clarity. You need two particular sections of the window to do this:

- The 'Quality' slider this lets you decrease the quality of the image
- The file size reading tells you how big the file is at the current quality setting



To begin, go to the Quality slider, at top right on the screen:



As you slide to the left to drop the quality, the number at the bottom of the window will also go down. Wait until it drops to under 70K:



The upper limit of the image file size is 70 kilobytes, but it should be as low as possible. However, this decreased file size might mean the image starts to degrade. You can compare the left and right images to ensure the quality has not dropped too far.

Checking the quality

You do not need to correct anything that looks odd in the original image, like the blurred background in the image below. You only need to check where the two images are different.

Here, the quality has dropped to the point where the image has pixelated – small squares forming on it. For example:



If you see something like this, use the slider to gradually increase the quality, until the pixelation has cleared.

Naming your image

Once you are happy with the quality and file size, click 'Save' at the bottom of the window. The standard window will appear allowing you to save your image. Here you need to set the name for your new image. It needs to be:

- All lower case
- Named so that individual words are separated-by-dashes
- Descriptive of the content e.g. student-in-lab.jpg, not DSC387234.jpg

Do not save over the original image, you will need its details when you upload.