

Insert Pictures into Documents

by
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Preparing the Picture - The first step is to prepare the picture that you are planning to insert. Does it need to be cropped? If so, do it now. Does it need adjustment (brightness, contrast, or color)? These are things that can be done better and more easily using a graphics software package. If you don't have one may I suggest Gimp, which is a free program that will do everything we are going to need and much more.

The main thing we need to do is to reduce the size of the picture. I know you spent good money buying a camera with all those megapixels but they aren't what we need here. What is needed is a reasonable compromise between quality and file size.

For the picture on the right my camera produced a 3264 x 2448 pixel file which occupied 3517 Kb as a compressed (.jpg) file on my disk drive. First I cropped the picture to 2508 x 2124 pixels, which would still be a file of 2344 Kb. This is still too big, imagine what a half a dozen pictures of this size would do to the size of a small document. It isn't pretty. Therefore, before inserting it into the document I reduced its height and width by a factor of four. The resulting 627 x 531 pixel file is only 114 Kb, about 3% of the original. Even after I inserted the file I further reduced its display size to 2.6" x 2.2". This does not further reduce the file size nor the quality of the image information that is in the document. As I will show on the following page a reduction of the image dimensions in pixels of 50-75% gives a good quality image that is significantly smaller.



How to Reduce the Size of an Image

This is done in two stages. The first is done in an image editor and actually reduces the number of pixels that make up the image.

I will attempt a step by step description of how to prepare a photo for display. I will use a free program that is much like Photoshop. It is called "Gimp". Once again the initial full frame size of the picture is 3264 x 2448 pixels. The first step will be to crop the image. The cropping tool is the second icon in the third row of icons in the toolbox. I decided on a relatively drastic cropping which will change the picture from landscape to portrait. I selected the cropping tool and then positioned the cursor in the picture at what I wanted to be the upper left-hand corner of the picture.



I then pressed the left mouse button and dragged the cropping tool from the upper left corner to the lower right corner where I released the left button.



Even after cropping the image was still 1700 x 2052 pixels. I decided to reduce the size still further using the Image|Scale Image. First check that the chain links to the right of the image size boxes are linked. If they are not click on them to assure that the aspect ratio of the picture will not change. Then adjust either the width or the height to reduce the size of the picture. I used a factor of four to reduce the size to 475 x 573 pixels. Before leaving the image manipulation program use Select|All to select the image and then either Edit|Copy or Ctrl C to save a copy to the clipboard.

1 GIMP is short for GNU Image Manipulation Program. It was created as an open software project and it is free. You can download it from <http://www.gimp.org>. Feel free to substitute any other image manipulation application you may own.

Inserting the Image – Let us now concentrate on how to bring the image file into your word processor and position it on the page. I will attempt to tell how to do this for both Microsoft Word and OpenOffice Writer.

Position the cursor approximately where you want the image to be in your document and use either Edit|Paste or Ctrl V to paste the picture into the document. DON'T PANIC! The picture will still appear way too big and your text will flee from it.

You will need to resize the picture. This is the second step in reducing its size but it will only effect how large the image appears on the page, it will not further reduce the number of pixels that make up the image. In the examples above I reduced the size by a factor of four in both dimensions which will reduce the file size by nearly 16 x.

Note that whenever a picture is selected the picture toolbar becomes visible. You can also check by looking to see if the little boxes are visible in the corners of the pictures and in the centers of its sides.

MS Word Users will do this:

Right click the picture. Microsoft Word will bring up a menu that includes Format Picture. Use the Size tab to scale the picture to approximately 25% of its size. You can always adjust this up or down later if the result is not what you wanted.

Next you will need to wrap the text. Note that whenever you have selected a picture a special toolbar appears.

Microsoft Word's looks like the one on the right. Click on the icon that looks like a dog standing in front of a venation blind. Choose the option called "tight."



OpenOffice Writer Users will do this:

Right clicking the picture in OpenOffice Writer will bring up a menu that includes Picture. Chose the crop tab and scale the picture to approximately 25% in both dimensions. In this one you will have to preserve the aspect ratio. You can always adjust this up or down later if the result is not what you wanted.

OpenOffice Writer's picture toolbar looks like the one below. I normally use the second icon (shown selected) but for graphics like the one below that go all the way across the page I use the first icon.



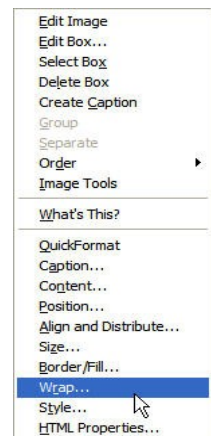
WordPerfect Users will do this²:

Click on Insert|Graphics/Pictures|From File. Browse to the picture and select it. Click Open to insert. Once the picture is inserted into the document, right click the picture to bring up a menu for formatting. Click Size to scale the picture to approximately 25% of its size. You can always adjust this up or down later if the result is not what you want. Be sure to maintain proportions.

To wrap the text click Wrap in the popup menu and select your wrapping choice.

To position the picture and lock it into position, click Position in the popup menu. You may position the picture by paragraph, character or page. In addition, you may position vertically or horizontally. If you position by page, check Box Stays on Page.

To insert spacing inside and/or outside, click Border/Fill in the popup menu. The picture may also be positioned by dragging and dropping.



Setting the wrap option appropriately will allow your text to wrap around the picture. Next, move your cursor to the picture, press and hold the left button down as you drag the picture to where you want it to appear. Note that because of the text wrapping you may have to make several adjustments before you have it just right. Ok,

² Thanks to Mary O'Neill, a dedicated WordPerfect user for supplying the WordPerfect version of the instructions.

sometimes it has a mind of its own. I have observed that it is easier to position a picture after the text is in place. Pictures appear to have an aversion to being placed at the top of a new page unless there is text there to hide within. They will not go onto a page that does not contain return characters unless that is the only place they will fit.

When inserting pictures always start at the top of the document and work your way down. If you change the size of a picture near the top of the document or add/delete text it can affect the placement of everything below it. Although I tend to insert pictures as I go I make a point of not allowing myself to obsess over the layout until I have virtually finished the document, inserted all the images, and adjusted everything from the top down.

Microsoft Word generally allows some space around the picture but OpenOffice tends to start/end text very close to the picture. To fix this right click on the picture and select Picture. Move to the Wrap tab and you will find adjustments for the spacing to the left, right, top, and bottom of the picture. I generally use 0.1" to the left or right depending on the placement of the picture and no space above or below because you can generally adjust the placement to provide the desired space.

A Final Note on Sizing

It may seem tempting to use a photo editor like Gimp to make the picture the exact size that it is to appear in your document. Unfortunately this does not produce satisfying results. The images will appear blurred and somewhat grainy. I have experimented at some length and found that an image that is about 4 times the final intended dimensions will produce a reasonable compromise between file size and quality on your monitor or on an 8 ½ x 11 printed page.

Note: I have prepared a separate file on How to Size Pictures for Use in Documents that shows one of the experiments mentioned above. I chose not to attach this document to the current document because of its large size. Those of you who are using dial-up connections would be better off taking my word for this rather than downloading the file.
