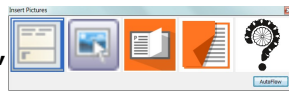# Working With Pictures

Inserting Multiple Pictures

1. From the insert picture dialogue, use Ctrl + Click, Shift + Click, or Marquee drag to select multiple pictures before opening them. Click, or click and drag, to insert each of the selected pictures, or click Autoflow to add them to picture frames.

2. Open the Pictures category of the Assets Tab. Click Add… to select pictures from the hard drive, or Browse… to open the Assets Manager, and select images to add to the assets tab. Drag pictures from the Assets Tab onto the page, or into picture frames, or use the Autoflow option at the bottom of the Pictures category to flow images to empty frames.

3. Drag and drop selected image files from Windows Explorer into your publication. They will be stacked on top of one another. Reposition and resize them as needed.

Using Picture Frames

Insert a rectangular picture frame from the picture fly-out on the Tools toolbar or open the Picture Frames category on the Assets Tab, click on Browse… and select one of many decorative picture frames to add to the assets tab. Drag the picture frame from the Assets Tab to the page, or drop it onto an existing picture or picture frame to add or change the border.
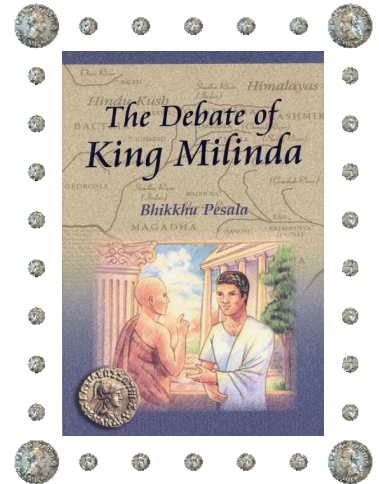
By default, the border will be applied to all four sides of the picture. Right-click, format, to open the Line and Border dialogue, and open the "Edges" drop down to deselect one or more sides to omit. This technique will allow two or more picture frames to be grouped, apparently sharing the same border as illustrated below.

On the line and border dialogue are options to set the width of the border, to choose the alignment — outside, middle, or inside — to draw the inside, or place it behind the contents.

Picture or Picture Frame?

Picture frames have several benefits over pictures:

1. A picture in a frame can be replaced with one having a different aspect ratio, or the frame can be freely resized without distorting the picture.

2. A picture frame has extra icons: position, rotate, zoom, in addition to the replace picture icon. Inline images and picture frames also have an anchor object properties icon.

3. The context toolbar on a picture frame has an option to modify the frame properties: scale to maximum fit, minimum fit, stretch to fit, or no scale.

4. A picture frame can be any shape: an ellipse, a star, an octagon, or whatever you need.

5. A whole collection of pictures can be added to consecutive picture frames automatically by using the Autoflow option.

Custom Picture Frames

Customised picture frames can be created by importing a bitmap into the Line and Border dialogue. The sides repeat as often as necessary between the corners to fit the frame's dimensions.

The PNG source image for the border on the right is shown below. Note that the faces on the coins are flipped but not the text.
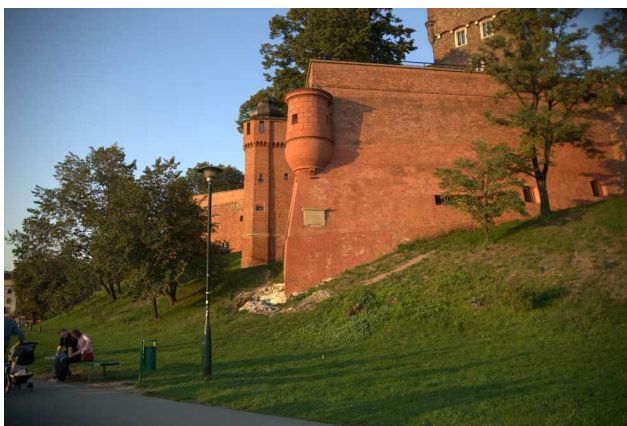
Image Dimensions, Resolution, Quality, and Size

Dimensions and Resolution

Print houses will often request images at 300 dpi. Publish to PDF will give a warning if the resolution is less than 150 dpi. It is important to understand that resolution does not measure the quality of the image, just the number of pixels per inch on the printed page. The image on the right has a native resolution of 72 dpi, but it is placed on the page at 300 dpi. Its dimensions are 984 x 655 pixels, its size on disk is 68 Kbytes.

The second version of the same image has a resolution of 300 dpi. Its dimensions are 984 x 655 pixels and its size on disk is 140 Kbytes. Its quality is better, but there is no more detail in the image. The size on disk depends on the JPG compression. The first uses a quality setting of 50, while the second uses 75 without chroma sub-sampling.

This third version has a resolution of 600 dpi. Its dimensions are 1,968 x 1,310 pixels and its size on disk is 148 Kbytes. Its quality is lower than the first two images, but it contains more detail.
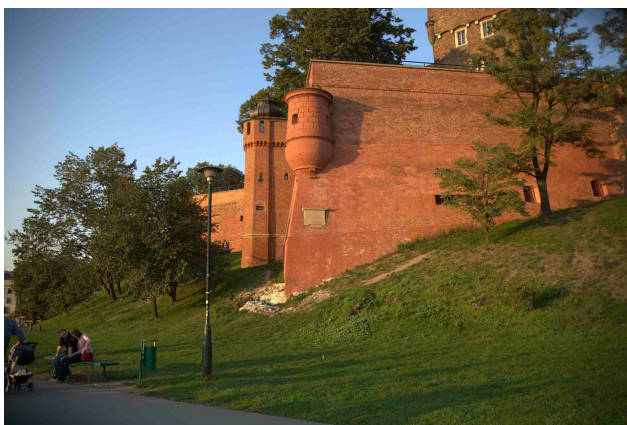
This fourth image has dimensions of 984 x 655 pixels, like the first two, but it is *cropped* from the original image, not *resampled.* It resolution is 150 dpi, and it was saved at a quality of 90 without chroma subsampling. It is 28 Kbytes bigger than the third image, although it contains only a quarter as many pixels.

72 dpi • 984 x 655 pixels • 68 Kb

300 dpi • 984 x 655 pixels • 140 Kb

600 dpi • 1968 x 1310 pixels • 148 Kb

150 dpi • 984 x 655 pixels • 176 Kb

Quality and Size on Disk

Photographs are best saved using the JPG format because it gives very good compression without losing too much quality. If you zoom in to the third image, which is the lowest quality and highest compression the sky suffers from severe banding and the trees are surrounded by artefacts. However, if viewed on the web at 100% the low quality is not too obvious and there is more detail than in the first two images. On a web page, it will be twice the size at 100% — its high resolution of 600 dpi means nothing on the web, its only the number of pixels that matters.

The fourth image is only 150 dpi, but the large text on the plaque is legible. If we were only interested in the plaque we could crop it further and resample it by 400% to make the image larger on the web page. However, that won't add any detail to the image, it just makes it fuzzy. Only using a zoom lens would let us read the small print.

The 400% enlarged detail of the plaque below is also 984 x 655 pixels @ 600 dpi. It is placed on the page at 1200 dpi. Its size on disk is 44 Kbytes and its JPG quality is 75. Its size on disk is smaller, in spite of having the same number of pixels.

Before placing images, optimising *copies* for the current job — do not edit the original images.

600 dpi • 984 x 655 pixels • 44 Kb

Manipulating Images With PagePlus

Resizing by Dragging

Drag any image by the corner handles to resize it on the page. Hold down the shift key to disable the aspect ratio lock to stretch it disproportionately. Hold Ctrl to resize it about the centre. Rotate it using the cursor outside the corner handles. The image is still the same number of pixels and the same quality. Only its size and resolution on the page is changed.

Picture Properties Dialogue

Right-click on an image to open the picture properties dialogue. Disable the "Allow resampling" check-box and enter the desired size or resolution. Values greater than 300 can be typed. It is like resizing by dragging, but it allows precise values to be entered.

If the "Allow resampling" checkbox is enabled, the image will be resampled using the method selected in the drop down list. Lanczos3 is the slowest but also the best quality. Dragging the slider to the extreme right will increase the resolution to 300 dpi, which is the value recommended for print quality. As you can see with this image, the "quality" is not good at all — the image is severely blurred. Resizing an image in this way to increase the resolution may stop a printer asking for a 300 dpi version of 96 dpi screen shots, but it does nothing to improve your images. It increases the file size too, as it is now 32-bit instead of 24-bit. Instead, use the resize without resampling method as I have done with the Picture Size & Resolution dialogue to shrink the image on the page until the 120 dpi image is at 300 dpi or greater.
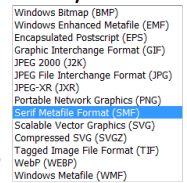
Convert to Picture

Select any object. From the Tools menu, select Convert To » Picture… With this route, one can select the target image format, the number of colours, and the compression quality. However, there is no option to choose the resampling method.

The dialogue is similar to that shown when Export as Picture is used, but without the export and close buttons.

Export from Resource Manager

Open any image in the Resource Manager and click on the Export button to open the Export as Picture dialogue.
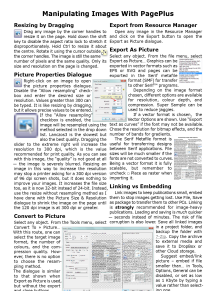
Export As Picture

Select any object. From the file menu, select Export as Picture… Graphics can be exported in vector formats such as EPS or SVG and pages can be exported in the Serif metafile format (SMF) for transfer to other Serif™ programs.

Depending on the image format chosen, different options are available for resolution, colour depth, and compression. Super Sample can be used to reduce jaggies.

If a vector format is chosen, the Vector Options are shown. Use "Export text as curves" if the font may not be available. Chose the resolution for bitmap effects, and the number of bands for gradients.

The Serif Metafile format is useful for transferring designs between Serif applications. File sizes will be much smaller if the fonts are not converted to curves. Being a vector format it is fully scalable, but remember to uncheck ☐ Place as raster when importing it.

Linking vs Embedding

Link images to keep publications small, embed them to stop images getting lost. Use File, Save as package to transfer them to other PCs. Linking is **strongly** recommended for image-heavy publications. Loading and saving is *much* quicker — seconds instead of minutes. The risk of file corruption is also lower. Save all linked images in a project folder, and backup the folder with 7-Zip. Copy the archive to external media and save it to DropBox or other Cloud storage.

Suggest embed/link picture – embed if file smaller than… in Tools, Options, General can be disabled, or set as low as 1 Kbyte by typing a value rather than selecting one.