# SCOPE

This document covers the process cropping and resizing an image to a suitable size in pixels for digital projection.

This process assumes the use of XnView (see Appendix), a free image editor from http://www.xnview.com

## PURPOSE

To ensure that images used for projection have the most suitable aspect ratio, i.e. 4:3.

To ensure that the images are downsized to a pixel size that is appropriate for projection, i.e. 1024x768 pixels.

To ensure the PC and program resources required are minimised without adversely affecting the quality of projected images.

### **APPENDIX: XnView Information**

### HOW-TO STEPS

#### OPEN IMAGE

- 1. Open XnView
- 2. Browse to the folder containing the image. The browser & folder tree is shown on the left hand side of the window.
- **3.** Double click the image thumbnail to open it in a new tab.



# CROP

This step is optional, go to resize if not cropping.

**4.** Select Edit\Set Selection Ratio Choose 4:3 (1.33) for a horizontal image to fill the projection screen



 Create a crop rectangle by dragging the mouse on the image. The rectangle will stay in the set ratio. Drag a corner or side to change size. Click and drag inside the rectangle to move the position of the crop. The example is horizontal format, it is similar for vertical format images.



- **6.** Adjust size and position and of crop. Drag corner or side of crop to change size; ration will not change. Select within crop box and drag to position.
- 7. Click Crop Scissors icon to apply crop.

## RESIZE

8. Select Image\Resize



**9.** Click Custom and enter the pixel size directly. Horizontal format enter: W=1024. Vertical Format H=768. The other size will set automatically.

Standard	Size	Standard Size	Standard Size				
Custom		Custom	•				
Screen Si Width Height	ze 3456	Custom 160x120 320x240 640x480 720x576					
Print Size Width Height	48.000 v inch	▼ 1280x600 1024x768 1280x1024 <sup>3</sup> 1600x1200 1280x800 1440x900					
Units	72 * pixels/	inch					
Keep rat	tio	25% 50%					
(esample	Hanning	▼   H(75% 100% 200%					

**10.** Select Resample method and OK *Choose Lanzos or Hanning* 

## SHARPEN (Optional)

Resizing will soften the image so this step is to counteract this effect.

**11.** Select Filter\Effects



- **12.** Select Sharpen and adjust as required. *A parameter value of between 20 and 50 seems to give a satisfactory result.*
- 13. Tick Apply to Image and OK

### SAVE AS

- 14. Select File\Save As
- 15. Select the folder to save to.
- 16. Enter a new File Name and select jpeg

				- 0	01 🗗 🛄 🕶		General	General Read	Write
Network Magic Folders Recent Items Desktop Decuments Computer	Name Q(Q)e-mail Q007-12-0 Q007-12-0 Q007-12-26 _MG_6990 Q008-02-01 File name: Save as tope:	Date taken 2007-12-0 2 2007-12-0 2 2007-12-0 2 2007-12-26 2 2008-02-01 2 C(bocus 1024 JPG - JPEG	Tags 2007-12-0 2007-12-0 2007-12-0 2007-12-26 _MG_7003 2008-02-01 x768 //EIF	Size 2007-12-0 2007-12-0 2007-12-26 2007-12-26 MG_7008	Rating 2007-12-0 2007-12-26 _MG 6987 2008-02-01 Helliborus Helliborus	E E Save Cancel	Keyboard/Mouse Read/Write Interface Toolbar Browser File List Thumbnals Preview View Fullscreen System integration Associations	Windows BMP CompW DPX/Cinecon RlashPix GIF HP GROB IFF JPEG-2000 PCX PDF PNG PPM/PGM/PBM RAW Softimage TARGA TIFF Wavel J Wavelet (Wic) HD Photo LWF LDF LDF LDF LDF LDF JPm LWF JPEG-2000	Progressive ○ Optimize Huffman table Lowest Best Quality ✓ Keep EXIF data ✓ Keep EXIF data ✓ Keep IPTC data ✓ Rebuild embedded thumbnail □ Use estimated quality if possible DCT Method Slow Smoothing factor 0 ☆ SubSampling factor 2x2,1x1,1x1 (default) ▼

- **17.** Click options and select and select a suitable Quality; 100 for best, OK. *Note the other ticks on screen shot above.*
- 18. Click Save.

#### APPENDIX

XnView Image Editor Software

XnView is a utility for viewing and converting graphic files.

**XnView** is provided as **FREEWARE** for private non-commercial or educational use, including non-profit organizations.

Web site (English): http://pagesperso-orange.fr/pierre.g/xnview/enhome.html

#### Features

Import about 400 graphic file formats

- Export about 50 graphic file formats
- Multipage TIFF, Animated GIF, Animated ICO support
- Image IPTC, EXIF metadata support
- EXIF auto rotation support
- IPTC editing
- Resize, rotate, crop support
- Lossless rotate & crop (jpeg) support
- Adjust brightness, contrast...
- Auto levels, contrast
- Modify number of colours
- Apply filters (blur, average, emboss, ...)
- Apply effects (lens, wave, ...)
- Full-screen mode
- Slide show with effects
- Batch convert, batch rename
- Create WEB page easily
- Screen capture
- Create contact Sheet
- Create or edit Multi-page file (TIFF, DCX, LDF)
- TWAIN & WIA support (Windows only)
- Print support (Windows only)
- Drag & Drop support (Windows only)
- Compare image side by side
- · Filmstrip layout
- 44 languages support (Windows only)
- And many other things...
- No Adware, No Spyware

### **MENUS – Screen Shots**



#### Appendix continued ...

👑 XnView - [2008-02-16_	MG_7391.jpg]		02-16	MG_7391.jpg]		
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	Flip	÷ .		Flip	•	Shadow/Highlight
	Swap	•		Swap	•	Normalize
	Extract channel	•		Extract channel	•	Align
	Resize	Shift+S		Resize Shi	Shift+S	Hue/Lightness/Saturation
	Canvas size	Shift+C Alt+Y		Canvas size	Shift+C Alt+Y	Conbright Gammasat
	Automatic crop			Automatic crop		
	Set DPI			Set DPI		
	Add Text	Shift+T		Add Text	Shift+T	
	Add Watermark			Add Watermark		
	Red Eyes correction	Ctrl+E		Red Eyes correction	Ctrl+E	
	Edit Palette	Ctrl+M		Edit Palette	Ctrl+M	

De-interlace

Reduce noise

Add uniform noise

Add gaussian noise

Add laplacian noise

Add poisson noise

Drop shadow 3D border Slice Shear Spread Swirl

- Noise

Effects

OK

Image Menu

User filter...

Flash (1.01)

FTP (1.04)

ImageShack (1.02)

CD (Nero) (1.0)

PNGOut (1.00)

ZIP Pack (1.0)

Paint (1.05)

Adobe Photoshop Plug-In...

dit View Image Filter Tools Window Info

[2008-02-16\_MG\_7391.jpg]

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2008-02-16 SEffects...



Parameters

Apply to image

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**Adjustments Sub Menu** 





#### Effects Sub Menu

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Tools Menu

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Cancel