Viewing and editing digital images with Xnview

POINTS OF VIEW

Xnview is a handy image viewing and editing tool that is free for private use. We'll show you around some of the program's best features. **BY THOMAS LEICHTENSTERN**

Your collection of digital images just keeps on growing, but you still don't have the right tool for image management and editing. Specialist programs abound, but they give you more than you need, and feature overkill only adds to the confusion. If you're looking for a practical tool for managing images, Xnview [1] may be the answer.

Xnview reads over 400 image formats and writes almost 40, yet it is simple enough for the everyday user. The tool is free for private use. The prices (in Euros) for commercial use are shown in Table 1.

Xnview is both an image browser and a viewer with several editing options. The package also comes with a batch converter, a slide show feature, and a thumbnail generator, which is useful if you want to host your best images on a website. The program reads and writes

meta information in IPCT format, and it also reads EXIF data, that is, the technical information for an image.

Image Browser

When launched, Xnview comes up with the Image Browser (Figure 1), which is divided into three frames: the directory tree on the left of the window, the thumbnail preview at top right, and the image preview below it. Clicking on a thumbnail displays the corresponding image. The *View | Layout* menu item allows you to change the browser window setup or the thumbnail size.

The file history is a useful navigational aid; it is accessible via the *File* menu. To check the directory history, click on the icon to the right of the address bar. This icon also takes you to the program's bookmark function, which allows you to

store the paths to directories you need to access frequently.

Image Collections

Xnview offers two approaches to creating collections of images. Clicking on the *HTML* button in the toolbar creates a website with thumbnails of the selected images. You can use the dialog to specify parameters such as the thumbnail size, the number of columns and lines, and the gaps in between. To help you keep track, Xnview creates two subfolders in which the original images and the thumbnails are stored. You can upload the overview directly to a webserver.

The second approach follows a similar principle to create a *Contact Sheet*. In this case, Xnview does not create a website but a new image containing thumbnails of the selected originals. Clicking

on the icon to the right of *HTML* pops up a dialog where you can specify how you want the files to be displayed and what information (file size or name) the contact sheet should provide.

Getting the Details

If your images contain meta-information in EXIF or IPTC format, a small box in the lower right corner of the thumbnail points this out. EXIF [2] tells you the camera settings used to take the photo, for example, information about the f/ stop, the exposure time, or the resolution settings. IPTC [3] contains entries such as the genre, creator, origin, or copyright notices. These entries are mainly used for image archive management. Programs such as *Imgseek* can categorize images based on this information.

To read this information, right click the required thumbnail, then select *Properties...* in the drop-down menu. In the new window that appears, click on the tab with the information you wish to view at the top of the image. The *Edit IPTC...* item in the drop-down takes you to IPTC information editing mode.

All At One Go

Fresh from the camera, digital images typically have intuitive names such as *IMG_0815.JPG*. Xnview has the *Batch*

rename tool (Figure 2) to assign more meaningful names. Select all the images you would like to rename, then press the right button and select *Batch rename...* from the drop-down. You can set a prefix for all the images on the left of the dialog. Let's use *Vacation# Start:*0, *Step:*1 as an example. This tells the program to rename all your files based on the pattern of *Vacation0.jpg, Vacation1.jpg...*. If you would like to standardize the case, you can set your preferred values in *Filename case*.

Screen Photography

Xnview also has a screenshot tool. Clicking on the camera symbol in the toolbox pops up the capture dialog. Besides the individual applications, which are organized in a list, you can also grab the whole screen, which is displayed in the viewer. Unfortunately, the tool does not give you the ability to hide the capture dialog, and this reduces its usefulness.

Image Viewer

Double clicking a thumbnail opens the corresponding image in the image viewer (Figure 3). The new image is a completely new instance; it comes with extended functionality and buttons not found with the browser. You can also launch directly into this view mode by entering *Xnview imagename* at the command line.

For Your Viewing Pleasure

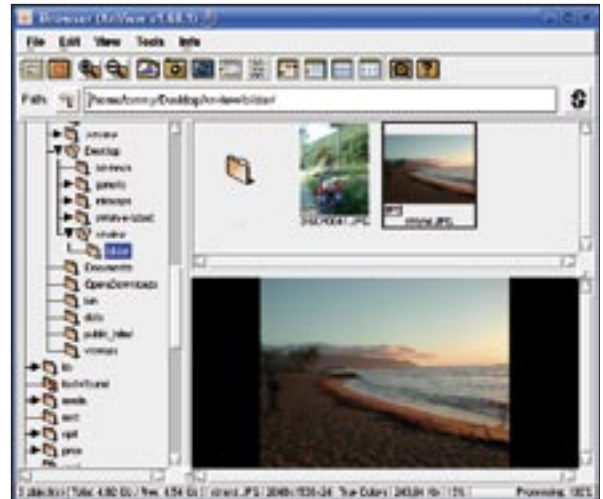The arrow buttons in the toolbox allow you to navigate the images in a direc-

Figure 1: The Image Browser displays a preview of the currently selected thumbnail.

tory. You can set the image display size by selecting *View | Auto Image Size*. The menu gives you options for scaling the image to the window size, and vice-versa. The option only affects the current image. To scale any images you view to the window size, you need to select *Tools | Options* to pop up the configuration window; then click on the *View* entry in the left-hand column and set the *Auto Image Size:* to your preferred value.

If you have a mouse with a scroll pad, the *Mouse* section lets you specify whether to use the scroll pad to navigate or zoom images. By default, the zoom steps are quite dramatic, and you might like to tone them down. To do so, click *View* in the *Options* dialog and enable the *Change zoom in fixed steps* check box. Then enter a value (in percent) in the box to define the zooming steps.

The *High zoom quality* item tells Xnview to recalculate the image on zooming. This means that you get more detail for higher zoom factors. On the downside, you do need reasonably quick hardware to benefit from this feature; a slow machine can take up to a few minutes to recalculate an image.

Clicking on *Full Screen* in the toolbox, or pressing the keyboard shortcut [CTRL F], toggles the program to full screen mode. You can then use the right and left mouse buttons to navigate to the next or previous image; [Esc] closes the full screen view.

Xnview has a slide show feature for viewing multiple images in succession. To launch the slide show, select *View |*

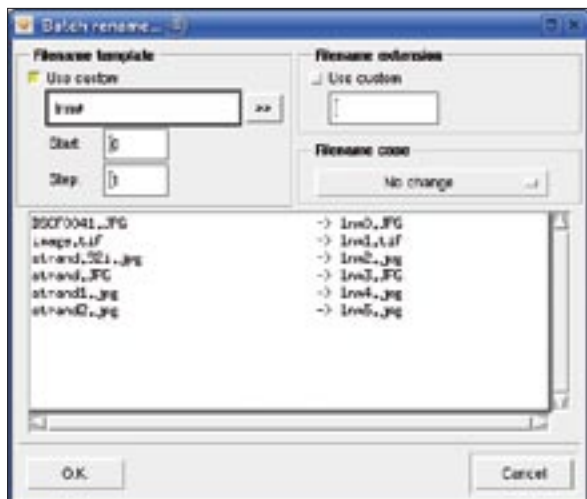| Table 1: Xnview Commercial License Options	
Number of Licenses	**Cost per User**
1 license	26.00 EUR
2-9 licenses	23.00 EUR
10-19 licenses	20.00 EUR
20-49 licenses	17.00 EUR
50-99 licenses	9.50 EUR
100-499 licenses	6.00 EUR
500-999 licenses	3.80 EUR
More than 1000 licenses	3.50 EUR

Figure 2: The Batch rename feature allows users to assign meaningful file names to multiple files.

Slide Show…, and then select the images or directories for the slide show in the dialog that appears.

The *Display Color Information* tooltip is a feature that web designers and graphic artists will really appreciate. The *Display Color Information* item in the *View* enables the feature, which shows you the hexadecimal and RGB values for the color below the current mouse position. Unfortunately, the window is visible through any other windows behind which it happens to be hiding, and this does tend to get on your nerves after a while. It is hard to say whether this persistence is a feature or if it is just a bug.

Manipulating Images

The program really shows its merit when you need to manipulate digital images.

All the tools you need to do this are hidden in the *Image* and *Filter* menus. Just like other image manipulation tools, the *Filter* items define operations for aliasing the image, whereas the *Image* actions affect the size, the contrast, or the color depth.

The *Image | Resize* option does exactly what you expect. If you need to convert an image to a standard size, you can select a standard in the *Custom* pull-down. Otherwise, you can enter the height or width of the image in *Screen Size* in the top third of the dialog. To avoid distorting the image, enable the *Keep ratio* check box.

The program has a selection of eight different resizing algorithms for power users, from *Nearest Neighbor* to *Lanczos* – this is something that not even a program like the Gimp or Photoshop can give you.

To adjust the brightness and color balance, select the *Adjust | Brightness/Contrast/Color Balance* item in the *Image* menu (Figure 4). You can use the sliders to set the required value. If you have enabled *Auto view* at the bottom of the window, you can monitor the effect of your changes.

To rotate and flip JPEG-formated images, select the *JPEG Lossless Trans-*

formations tool. The changes are applied to the image immediately, and the change is loss-free, meaning that you can repeat these actions multiple times without affecting image quality.

With the exception of global changes such as color conversions or scaling, more or less any of the available image manipulation tools can be applied to a selection within an individual image. To define a selection, just hold down the left mouse button, and drag a frame over the required area. The squares at the edge of the frame are so-called handles that allow you to scale the current selection. Clicking on the scissors in the toolbox crops the selection.

Xnview also has a red-eye tool to help you touch up flash photos that have gone wrong. As the function changes any red hues within a specific range to darker hues, you need to precisely select the target area before applying the tool. It is a good idea to home in on each eye individually and then select *Image | Edit red eye correction* to make the changes. If the results are not to your liking, just click the *Undo* button to restore the original state.

Batch Processing

If you need to apply the same procedures to a number of images, Xnview's batch processing feature can be a big help. Batch processing helps you apply all of Xnview's functions and filters to multiple images.

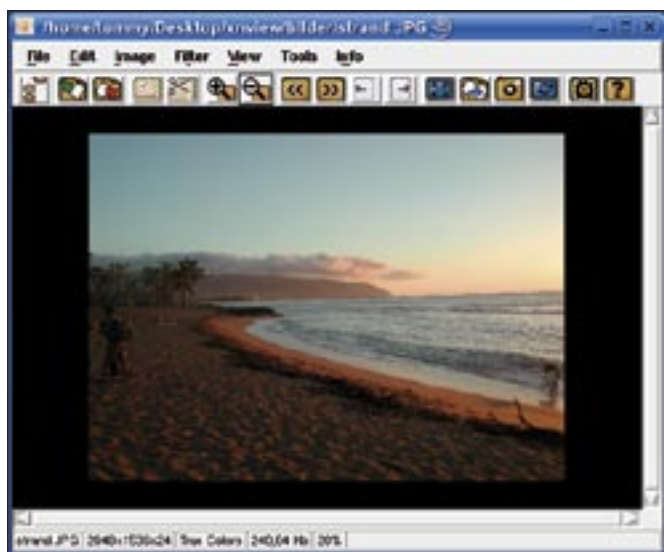To modify the size and brightness for a number of images, start by selecting

Figure 3: Some Image Viewer icons are non-intuitive. The lack of documentation means trial and error is the order of the day.
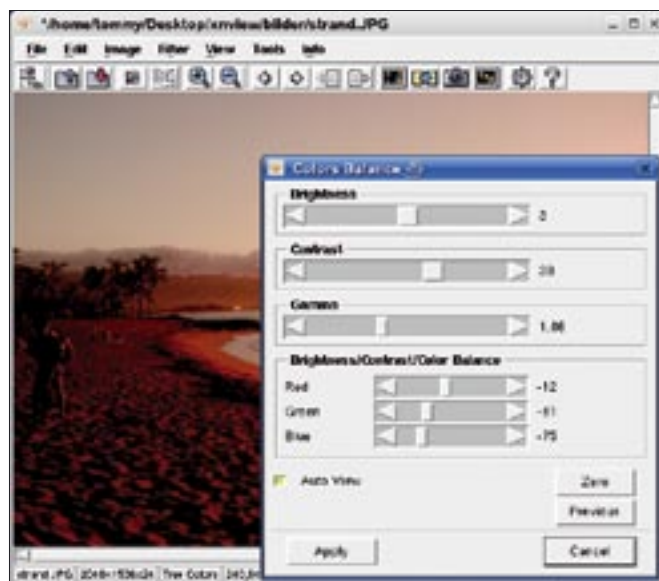

Figure 4: Adjusting brightness and contrast in Xnview.

Tools | Multi convert... (Figure 5), then click *Add...* to add the images you want to process. If you would like to store the images in a new directory, use the *Directory* field to specify the name of the directory. If you do not select a directory,

Figure 5: The Xnview batch converter lets you process multiple images.

Xnview will write the new files to the original directory.

In *Directory*, select the required image format from the drop-down menu. The *Options...* button allows you to specify settings such as the compression level.

Now open the filter selection dialog by clicking *Advanced Operations...*. In the list on the left, select the *resize* and *Brightness* entries. Press [Ctrl] to select multiple entries at the same time. When you are ready, click on the right arrow button to apply your selection.

To fine tune an operation, click on the operation in the right-hand window. A dialog appears in the lower part of the window, showing you the options for the current operation. Finally, to start converting, click on *Go*.

You can click the *Save Script...* icon to save your settings. Note that the script

will store the selected operations but not the formats and directories.

Conclusions

Xnview's many useful features, and its support for an incredible 400 image formats, make it a universal tool. On the other hand, the program lacks genuine documentation, and you can easily trip over the non-intuitive controls.

A few minor bugs, such as the pesky *Display Information* window showing through any window on top, are annoying, but perhaps more disturbing is the fact that the *Undo* feature only allows you to undo the last action. The program also lacks a drag & drop function that allows users to move images from a directory to the program. ∎

INFO
[1] Xnview-Homepage: *http://www.Xnview.com*
[2] EXIF Specification: *http://www.exif. org/specifications.html*
[3] IPTC specification: *http://www.iptc.org/IIM/*